Selections from the pre-Mutiny Records of the Commissioner in Sind.

(iv) 335

00108236

Digitized with financial assistance from
Shri Brihad Bhartiya Samaj
on 20 February, 2020

10223

Selections from the pre-Mutiny Records of the Commissioner in Sind.

L (IV) 355

INDEX.

Selections from the Records of the Commissioner in Sind.

No.	Subject.	Pages.
1	Report on the condition and mode of Administration in Sind.	1—35
2	Revenue queries by Mr. R. K. Pringle, Commissioner in Sind to Collectors in Sind, and replies thereto.	39—143
3	Remarks on the State of Affairs at Kelat by Mr. (afterwards Sir) H. B. E. Frere, Commissioner in Sind.	147—173
4	Memorandum of portions of correspondence between the acting Commissioner in Sind and Government relative to the attempts of the Persians to obtain a footing in Mekran, and to the aid afforded to the Persians by Azad Khan of Kharan.	177—181
5	Journey from Mandvi to Hyderabad (Sind) and from Hyderabad to Khairpoor and back (December 1831 to May 1832) Narrative of a— by Lieutenant E. Delhoste, Surveyor, Sind Mission, of a—	185—237
6	An account of [illegible] details of administration [illegible]elopment in Sind, relating to the pre-conquest period.	241—277
7	Routes taken by Colonel Soppitt's Detachment in May 1841, from Quetta to Noushkey.	281—305
8	Thar Parkar Affairs—	309—338
	(1) Disputes between the Jodhpur Darbar and Government of Sind with regard to the boundaries of Umarkot.	

No.	Subject.	Pages.
	(2) Boundary dispute between H. H. Mir Ali Murad Khan, Talpur, Ruler of Khairpoor, and the Rajah of Jessulmeer.	
	(3) Transfer of Umarkot from Jodhpur State to the Province of Sind.	
9	nstructions to Deputy Collectors of Hyderabad district regarding collection of grain revenue in Hyderabad Collectorate, 1843—1847.	341—351
10 & 11	(1) Creation of the appointment of the Commissioner in Sind and his duties described, 1847.	355—390
	(2) Annexation of the Province of Sind to Bombay Presidency, 1847.	
12	(*a*) Military Commission appointed by Sir Charles Napier to enquire into a complaint against Seth Naomul, Head Kardar of Kurrachee, and findings of the Commission, 1847.	393—474
	(*b*) Seth Naomul's Appeal to Government ...	
	(*c*) Government decision recognizing his services.	
13	Memorandum by Mr. A. Young, Deputy Collector, Mehar, on the Buttai System.	477—487
14	Schemes for Kurrachee water-supply— ...	491—683
	(*a*) By Captain Delisle, Engineer, 1857.	
	(*b*) By Mr. John Brunton, M.I.C.E., 1860.	
	(*c*) By Mr. Barns, 1866.	
	(*d*) By Khan Bahadur Murad Khan, 1866—68.	

Selections from the Records of the Commissioner in Sind.

SELECTION No. I.

Report on the condition and mode of Administration in Sind by Mr. R. K. Pringle, Commissioner in Sind, submitted to Government in 1847.

No. 3886 of 1847.

POLITICAL DEPARTMENT.

Dated 31st December 1847.

From

THE COMMISSIONER IN SIND.

To

THE HONOURABLE G. R. CLERK,
GOVERNOR OF BOMBAY.

Subject.—**Report on the condition and mode of Administration in Sind.**

HON'BLE SIR,

Introductory.

In order that you may be placed in possession, on your arrival in this Province, of such information as to its condition and mode of administration as may supply you with the materials for framing a plan for its future Civil Government, I do myself the honour to submit the result of the enquiries instituted by me with that view, in as complete a form as the shortness of my residence in the Province and my previous unacquaintance with its circumstances will permit.

Course pursued for collecting information.

2. The course which I have adopted for this purpose has been to address queries on the various subjects, administrative and statistical, on which it occurred to me that information would be required, to those officers whose duties and position afforded them the means of furnishing it. Their replies will be found in the documents appended to this report; to these I beg to refer for the elucidation of details. My own observations will be confined to a general view of their result, and to such remarks and suggestions as arise out of it.

Boundaries of the Province.

3. The British Province of Sind has the states of Kelat on the west and north; Mooltan, Bahawalpur, H. H. Meer Ali Murad, Jessulmeer, Balmeer and Cutch on the north-east,

east and south-east; and the sea on the south and south-west. With the exception of its seaward boundary, a mountainous chain on the west, and those parts adjoining the country of Meer Ali Murad and the Nawab of Bahawalpur, its immediate frontier is desert. Its characteristic feature is the Indus which flows through its centre and the canals diverging from that river. To the southward it extends on either side of the Indus; to the northward, with the exception of a small tract immediately above Roree, it is met on the eastern bank by the Territory of Meer Ali Murad. Its length from north to south may be about four hundred miles; its breadth does not much exceed 40 miles in the upper portion, but extends from 200 to 250 in the lower and larger portion; the average breadth may be about 120, which would give 48,000 square miles for its superficial area. Of this however a large proportion, beyond the influence of the river or in the vicinity of the sea, is sandy desert or salt morass. That which is cultivated and subjected to irrigation is for the most part a productive alluvial soil. The climate is remarkably dry: colder than most parts of India in the cold season, and hotter in the hot season. Rain falls seldom, but very heavily when it does fall. The produce is similiar to that of India, bajree and jowari being the principal early crops and wheat and barley the principal late crops; the former most prevalent in the upper, the latter in the lower portion. Rice is grown partially to the northward but more extensively in the low southern parts towards the sea; in favourable localities, cotton, indigo, sugarcane and tobacco are raised, though not to a great extent or for exportation; opium might be cultivated in some places with success, but is prohibited. The population is estimated to amount to 1,274,732, which, taking the area as above computed at 48,000 square miles, would give nearly 27 to the square mile. With reference however to the prevalent opinion as to the deficiency of population and the large portion of the surface occupied by desert and morass, I should be inclined to think even this moderate proportion a high estimate. The population is composed of Sindhis, Baluchees and Hindus; the two former profess the Muhammadan faith, the Sindhis being supposed to have been converted to it from Hinduism. The Sindhis and Hindus are the more industrious and peaceable races, the

Characteristic feature, River Indus.

Estimate of length, breadth and superficial area.

Soil aud climate.

Products.

Estimate of population.

Its composition.

Baluchis the more warlike and turbulent. The Hindus are chiefly occupied in trade, the others in agriculture and fishing.

4. The Province is divided into three Collectorates; Shikarpur to the north, situated, with the exception of a small portion, on the western bank of the Indus and Hyderabad and Karachi to the south, situated respectively on the eastern and western banks. Their average revenues, as realized by the Collectors for the three official years intervening between the present year and that of the conquest, were— Territorial divisions and their revenue.

Shikarpur ...	...	Rs. 1,066,000
Hyderabad ...	...	„ 1,068,545
Karachi	...	„ 618,940
	Total ...	Rs. 2,753,485

Besides the above, a small detached district to the north of the Runn is managed by the Political Agent in Cutch and there is a separate Collector for Sea Customs.

5. The principal sources from which the Revenue is now derived are land, fisheries, sea and frontier customs, excise on spirits and drugs, Judicial fees, fines, and miscellaneous items. Town and transit duties, which formerly existed, have been abolished as also many inconsiderable and partial cesses prevalent under the late Government. Principal sources of revenue.

6. The population is not, as in India, divided into village communities each having its hereditary establishment for the management of its affairs; nor are there any hereditary district establishments; the heads of tribes and castes exercise an undefined influence among their members, and this may in some degree, though I apprehend very imperfectly, supply the want of those useful institutions which contribute so much to facilitate our revenue and police arrangements in India. In some pergunnahs indeed there is an officer termed "Kotar" Absence of hereditary village and district establishments.

or "Kotwal" who is described as performing many of the duties usually assigned to the Mhars or Dehars in India, but he appears to be rather a Government than a village servant, although the office is usually held hereditarily. The zamindars in some places elect a sort of representative for the management of public affairs under the denomination of "Muccuddum" or "Urbab" but this does not appear to be general or analogous to any of the offices in the hereditary district establishments of India. The boundaries of the village lands are defined, but their division into separate fields as in India is unusual.

Land tenure.

7. Those lands in which no part of the Government interest is alienated, that is the greater portion of the lands, are held on the tenure common throughout India, of undisturbed occupancy so long as the revenue is paid at the established rates. The value of such a tenure must depend on the pressure of those rates; but that this is not heavy may be inferred from the extensive existence of a class of landlords under the name of zamindars, living on rent and having labourers under them to cultivate the land. These are not hereditary district officers as those to whom the term is applied in most parts of the Bombay Presidency, but more nearly resemble in position, though not in the extent of their holdings, what I understand to be the zamindars of Bengal. A species of Putadar tenure is described as existing to a limited extent in the neighbourhood of Shikarpur, respecting the nature of which the Collector has not furnished full information.

Nature of the land revenue system of settlement and collection.

8. The bulk of the land revenue is assessed and realized in kind, at rates not exceeding one third of the gross produce, with some small additions to meet charges of irrigation and collection; lower rates are occasionally fixed with reference to the greater expense of irrigation or local circumstances. Money assessments exist, though not extensively; their terms are moderate considering the fertility of the soil; they are based on standard beega somewhat exceeding half an acre in extent; and the amount of cultivation under them is ascertained by annual measurement. The settlements are usually made with each cultivator or land holder individually, though occasionally with the villagers jointly or through the intervention

of a middleman. It is optional with the cultivators to redeem their corn rents at a money valuation if they desire it, but this is not often availed of. The agency employed by the Collector for the assessment and realization of the revenue consists of the Kardar or Native Manager of the district and certain officials required to measure the land and watch and divide the produce. The Government share of the revenue in kind is kept in public granaries until disposed of; the Collectors exercise their discretion as to its disposal by auction or contract, also as to the time and mode of realizing the proceeds, acting in these matters to the best of their judgment for the interests of Government. Under such a system there may be considerable variation in the annual amount of revenue; but with proper management there is no great cause for outstanding balances or defalcations, and these accordingly appear to be un-frequent.

Alienated land.

9. The land alienated in Jagheer is estimated at about 1/10th of the Government land, but only a small proportion of this is cultivated. The alienations were chiefly for civil or military service, and in form are resumable at pleasure practically; however, a considerable portion of them held by families or individuals entitled to consideration were regranted wholly or partially to their heirs, and this practice has been continued since we got the country, at the discretion of the Government. All who made their submission within a given date were admitted to an investigation of their titles, which has been accomplished in regard to most of them, and their rights settled according to the result. It would be desirable now to fix a definite period beyond which no further investigation into titles would be gone into except under special and peculiar circumstances. I should anticipate that a large portion of the alienated land would eventually revert to Government, but the right of resumption should be exercised with caution and consideration. The Collector of Shikarpur alludes to a regulated system for the disposal of such cases, but this I am led to believe is rather what was under consideration than what has been actually introduced. With the exception of some inconsiderable grants to Suyuds and Fuqueers, there are none of those charitable or religious alienations which are found to so large an extent in our Indian Provinces.

Extent of cultivation.

10. The cultivated land is estimated to amount to 1,175,000 beegas, but this forms but a very inconsiderable proportion of the extent capable of cultivation and still less of that of the whole surface including Desert. The cultivated area might doubtless be enlarged to a very great extent, with adequate means of irrigation which is here the principal requisite for developing the naturally fertile properties of the soil; for this, capital and population are wanted, and these it may be hoped will be forthcoming by degrees under a system of Government so much more favourable to their progress than that which has hitherto existed; the field for the improvement of the revenue from this the most legitimate source may therefore be considered promising. Temporary abatements of rents are given for bringing new land into cultivation, the terms of which are left to the discretion of the Collectors.

Advances to cultivators, their connection with money lenders.

11. Advances are made to the cultivators but with discrimination and caution, and the amount is for the most part punctually recovered. It is chiefly, however, from private capitalists that the cultivators derive the means of carrying on their operations; here, as in India, the great bulk of the tillers of the soil are indebted to money-lenders and for the accommodation derived from them they pay highly; they may in fact be considered as mere labourers, the wages of whose labour is limited to a bare subsistence, while their creditors are the class by whom, as the means of providing the agricultural stock are advanced, its profits are realized; viewed in this light, and with reference to the risk incurred, the rates of accommodation are not so excessive as they might appear if considered merely as interest on loans. It were perhaps a more healthy state of things if a larger share of the agricultural profits went to the immediate cultivator, but this I apprehend can be looked for only through an improvement in his industrial habits.

Remissions.

12. Remissions of rent on account of failures or misfortunes are very rare, there being little occasion for them where so large a portion of the revenue is taken in kind, and consequently accommodates itself to the state of the harvest. A source of difficulty frequently experienced in our detailed

annual settlements in other quarters is thus avoided, though perhaps others are encountered, in arriving at a correct estimate of the Government share of the produce.

Irrigation.

13. The cultivation of the land and consequently the main source of revenue, in this Province, is almost entirely dependent on artificial irrigation, in which respect it differs from most of the districts under the Bombay Presidency; the means of maintaining this become therefore a subject of vital importance, and have received and will continue to deserve the large share of the attention of Government. In addition to the information furnished by the Collectors on this subject a very elaborate report has been submitted by Major Scott, the Superintendent of Canals, to which I shall again have occasion to advert. That the subject has not been neglected since we got possession of the country will be apparent from the costly establishment which has been organised to look after its wants, but the operations of that establishment are yet in their infancy and I apprehend much experience remains to be acquired as to the most effective mode of directing them. The value attached to water for the purpose of irrigation leads to a jealous maintenance of the right to its use; disputes respecting it are settled by the Collectors according to local usage. Lands, the rest of the Government interest in which is alienated, are not exempted from contribution to the taxes imposed for the maintenance of the works necessary for irrigation.

System of agriculture

14. I have already adverted casually to the productiveness of the soil; this will be found more fully demonstrated in the details given by the Collectors. The seasons for the various processes of agriculture, and the modes in which it is conducted, are not materially different from those prevailing in India; the implements are rude in form and simple in construction, and made and repaired by local artificers paid for their work chiefly in grain; there is no hereditary village establishment for this purpose as in India. The cultivators are described as being ordinarily in better circumstances than in most parts of India with which I am acquainted, except perhaps the most fertile portions of Gujrat and the Southern Mahratta country.

Condition of the cultivators.

The class of zamindars or landlords I have already alluded to as forming a link in the chain of society here (? is), not usually found in that of other districts under the Bombay Presidency. I should have thought their presence would in many ways have contributed to the well being of the Society, but on this Captain Preedy, the Collector of Karachi, seems to entertain doubts.

Sale and mortgage of land.

Land is sold and mortgaged where the interest in it is sufficiently valuable to make it a subject for such transactions. Leases are occasionally granted by landlords to their tenants but not by Government. No compulsion is now used to maintain cultivation although such appears to have been the practice formerly, as is usual under native Governments. Partial surveys have occasionally been made for special purposes, and the lands assessed in money are annually measured for the settlement of their revenue, but no general revenue survey of the whole of the land appears ever to have been undertaken.

Weights, measures and currency.

15. Uniform weights and measure have been introduced in all revenue transactions, and are understood to be adopted to a considerable extent in private transactions, but in these their adoption is not obligatory. Our silver and copper currency has been universally introduced and is in general use; the old local coins are however received in payment of revenue at their intrinsic value for recoinage.

Village and district accounts.

16. There appear to be no detailed village accounts in the sense in which that description of documents is understood in the Bombay Collectorates, that is, as exhibiting the transactions between the individual cultivators and the village Managers. The system of revenue and establishments almost precludes the existence of such accounts, but if there be anything corresponding with them at all, it does not come under the cognizance of the Government officers; the settlement with the cultivator and the realization of what is due from him, is at once concluded by the division of the produce, except in the small portion of lands paying cash rents. The only accounts kept therefore in this stage are those relating to the division of the produce and measurement of the land; the subsequent ones

are analogous rather to our district or mamlatdars' accounts; these are all kept in Persian and will probably admit of considerable improvement when greater regularity is introduced and more attention paid to the subject.

Other classes of the population besides agriculturists.

17. I have dwelt at some length on the circumstances affecting the agricultural population and their transactions with Government, since here as in India they are the most important contributors to the public revenue Besides them there are in the smaller villages such artisans and petty shop-keepers as are required for the supply of the limited wants of the cultivators, and who are either directly or indirectly dependent on agriculture for their livelihood. In the larger towns there is of course a mixed population of persons following other pursuits; these are free from direct taxation.

Customs Revenue.

18. Next in importance to the land revenue is that derived from customs. This branch has been greatly simplified and improved since the Province came into our possession, by the abolition of town and transit duties and the introduction of the Bombay Customs Regulations and Tariff. The collections under this head are now confined to Frontier and Sea Customs, the former managed by the Collectors of land revenue and the latter by a special Collector of Customs. The system however differs from that practically in force under the Bombay Presidency, in as much as all the adjoining States have been declared 'foreign' for the purposes of the Customs Act, and the exports and imports across the land frontier have been subjected universally to the payment of duty, and restricted to prescribed routes, instead of those provisions being applied only to the States which have a sea-coast and where they are therefore necessary for the protection of our sea customs. It may be deserving of consideration whether the practice here might not with advantage be assimilated in this as it has been in all other respects to that prevailing under the Bombay Presidency. All interference with the inland trade, and the difficulty and cost of realizing a revenue from it, would thus be avoided; a stimulus would be given to our commercial dealings with the states in the interior; the products intended for internal consumption would

be relieved from taxation; and the general prosperity of the Province, and with it indirectly that of the land revenue, would be promoted, while the duties on such articles as are intended for exportation would be recovered to their full amount, and with greater convenience and less cost, at the outposts, where they have at present free egress on certificate of the duty having been paid at the land frontier. Before definitely recommending any modification in the existing practice in this respect, however, I should wish to have before me an estimate of its probable financial effect.

Excise Revenue.

19. The mode of realizing an excise revenue from the manufacture and sale of spirits and drugs varies in the different collectorates. In Shikarpur a public distillery system has been recently introduced in the principal towns and their vicinity. In the remote parts of that district, as also in the Collectorate of Hyderabad and Karachi, the farming system still continues. The revenue from this source is increasing, though rather perhaps from its having been brought under more systematic management than from any increase of consumption. The retail sale of opium is regulated on the same principles as in the Bombay Presidency; its importation as well as cultivation is prohibited.

Fisheries.

20. Fisheries yield a not inconsiderable revenue, their produce, both in the sea and river, being abundant and of good quality. They are disposed of in farm. Some revenue used to be derived by the late Government from a pearl fishery, but it appears to be not of a very valuable description, and its produce under us has been small.

Salt.

21. A large field of naturally formed salt, towards the mouth of the Indus, has recently attracted attention in consequence of the reports of Lieut. Burke. Its commercial capabilities have not yet been fully ascertained, but, in the event of their proving all that officer anticipates, I should look to it rather as affording a convenient subject for export in a country where exportable products are limited than as a source of revenue.

22. A partial equivalent for the stamp revenue of our regulation provinces is here provided in a tax of five per cent. on the amounts of civil suits. The limited extent of judicial business at present makes this not a very productive tax, and of more importance as a check to frivolous litigation than as a source of revenue, but eventually the introduction of stamps may be found a legitimate means of improving the revenue, when the state of the Province and the feelings of the people have become ripe for its reception. Taxes on Judicial Proceedings.

23. The other source of revenue, such as fines, escheats, etc., are of a miscellaneous character, and not of a sufficient importance to call for a detailed notice. They are similiar in their nature to those prevailing in our other Provinces, and more simple in their classification than we have always found and kept them in those Provinces; some slight modification in this respect may however with advantage be now introduced to bring their arrangement into conformity with that which has recently been adopted for general use under the Bombay Presidency. Miscellaneous Revenue.

24. The Province is territorially divided into Purgunnahs as is the case throughout India. One or more of these are under the management of a Head Native officer denominated a 'Kardar' whose duties are analogous in character, though his average jurisdiction is more limited in extent, than that of a Mamlatdar under the Bombay Presidency. In the Shikarpur Collectorate there are 35 such Kardars, the average annual amount of whose salaries and those of their establishments is Rs. 1,243 and the average amount of revenue under the management of each Rs. 30,467. In the Hyderabad Collectorate there are 56 Kardars the extent of whose charges vary greatly. In Karachi there are 18 Purgunnahs or groups of Purgunnahs under as many Kardars, and there too there is considerable variation both in the extent and value of each charge, their average revenue is Rs. 36,816. I am inclined to think that the whole of these districts establishments might with advantage be revised, and organised on a more uniform, economical and efficient scale. The Kardars have no Native agents employed in the Revenue Department.

permanent treasuries but forward such portion of the collections as passes through their hands, from time to time, by bills or under a Police escort to the Treasury of the Collector or one of his deputies.

European agents.

25. Each Collector has several deputies under him, whose position and duties correspond with those of Assistant Collectors under the Bombay Presidency. Of these there are five in the Shikarpur Collectorate, 6 in that of Hyderabad and 3 in that of Karachi. They are chiefly commissioned officers of the Bombay Army; a few are unconvenanted officers. In Shikarpur and Hyderabad two deputies remain at the head station to assist the Collector; the remainder, and those in Karachi have districts entrusted to their charge under the general control of the Collector, on the same plan as in the Bombay Collectorates, except that they have separate treasuries; the sums retained in these however are not large, the greater part of the revenue being paid direct into that of the Collector.

Collectors' establishments.

26. The establishments, English and Native, attached to the Collectors and their Deputies appear to be on a sufficiently liberal scale as compared with similiar offices under the Bombay Presidency, but a systematic revision might lead to their more uniform and efficient organization.

Collector's accounts.

27. In all matters connected with accounts the Collectors communicate direct with the offices of Account and Audit at Calcutta, and receive their instructions from them; and as those offices are unconnected with the local Government of this Province, this Branch of the Collector's duties has hitherto come little under the direct cognizance of that Government. On the formal annexation of the Province to Bombay it will doubtless require to be reorganized in conformity with the system prevailing there. The disbursements in each Collectorate, including those in the Military Department, being in excess of the receipts, there is no occasion for the remittance of surplus revenue.

Hearing petitions.

28. The Collectors and their Deputies are accessible every day for the receipt of petitions from those who have any representation to make or grievance to be redressed.

29. The Native Agency employed under the Collectors is almost entirely composed of natives of the Province, many of them those who had been employed in similiar duties under the former Government. Their general character for honesty is not considered worse than that of the same class in India. Several have been brought to trial for malversation, and in some instances sentenced to severe punishments, by Military Commissions, which may perhaps have imposed a greater check on such practices than is easily attainable under our more regular systems of Civil Government.

Composition and character of the Native Revenue Agency.

30. Very complete and authentic records of the revenue administration of the former Government, extending back for a considerable period, are forthcoming for Lower Sind, but for Upper Sind they are either lost or in too mutilated and incomplete a state to afford any valuable information; those for Lower Sind are useful for reference, and specially for the verification of grants, and the appreciation of evidence produced in support of claims to exemption from rent or other immunities.

Revenue records of former Government.

31. The Revenue administration of the former Government appears to have differed little in character from that of most Native Governments in India, or rather like them to have derived its character chiefly from that of its administrators, and therefore too frequently to have been arbitrary, and subject to no restraint but that of an indifferently enlightened self interest. Uuder us, while in form the system has undergone no material change, there can be little doubt that in substance its improvement has been vast. Moderation, simplicity, and equity have taken the place of rapacity, complexity and oppression; and although there may still be much room for improvement, I am inclined to think the progress hitherto would bear a very favourable comparison with that of most Provinces which had been for the same time under our rule, and reflects much credit on the officers to whom it is due. Those officers however have had the advantage of greater lights, and a larger accumulation of experience; perhaps, too, a more unfettered discretion than has always fallen to the lot of their predecessors in like circumstances.

Revenue Administration of former Government and under us.

Public gardens.

32. I may here notice, as connected with the developement of our Territorial resources, that public gardens have been cultivated with much success under the zealous and skilful superintendence of Major Blenkins, Assistant Commissary General. Some memoranda respecting these will be found among the documents in the appendix,* from which it will appear that, in addition to the benefit derived from them they have, what is not always the case with such establishments, yielded a profit instead of being a charge to Government. Their object has hitherto been rather practical utility than experiment, but it might with advantage be extended to embrace the latter also, and the measure appears to me one in every way deserving the encouragement of Government.

Major Scott's report.

33. In noticing the important place which works of irrigation occupy in the revenue economy of the Province, I have adverted to the report of Major Scott, the Superintendent of Canals. This document will be found among the appendices to this despatch. It is divided into five sections: the first contains a detail of the proceedings of the Department since its formation; the second remarks on the nature and extent of the irrigation; the third an account of the measures adopted for its maintenance under the former Government; the fourth those adopted under us and observations and suggestions connected with them; a fifth section has been added containing observations on the means of internal communication as appertaining also to the department over which Major Scott presides.

His views on irrigation.

34. It would be incompatible with my present object to follow Major Scott through the details of his elaborate report. I will therefore content myself with referring to it generally, as containing much valuable information and ingenious speculation on the subjects of which it treats. It will be seen from the account of the past proceedings of the department that they have hitherto been rather of an experimental and desultory character, and directed not exclusively to the subject of irrigation but to surveys and engineering projects generally. On these it may be presumed a considerable amount of useful information

* Not printed.

has been collected, although no very practical use has yet been made of it. It was not until last season that the labours of the department began to be more exclusively directed to the canals, and many difficulties have occurred to retard their progress. I am not prepared to say whether it may be expedient eventually to maintain this department on its present large and costly scale, but, if it be found efficient for the attainment of its objects, its importance to the interests of the Province can hardly be over-rated I would at all events recommend that no alteration should be attempted at present, and that the consideration of Major Scott's views and plans should be deferred until the experience of another season may enable him to bring them to greater maturity; any point connected with the details of his operations requiring earlier disposal can, if necessary, be brought forward in a separate form.

His views on internal communication.

35. It is satisfactory to be in possession of the views of an officer of Major Scott's experience and professional ability on the means of internal communication also; and these may be referred to with advantage in the consideration of any future measures connected with a subject so important to the prosperity of the country. At present I need only direct attention to them as furnishing the only information yet on record as to the wants of the Province in this respect and the means of meeting them.

His statistical tables.

36. Major Scott has separately submitted a voluminous series of documents exhibiting in a tabular form much valuable information on statistics of the Province generally, and more specially as bearing on its fiscal resources; those yet received are only for the Hyderabad Collectorate, but similiar documents are stated to be in progress for the other Collectorates, and those for Karachi may be soon expected. In the detailed form in which these papers are now submitted, and unaccompanied as they are by any general abstract of their results, it would answer no purpose to forward them in full, or to attempt to draw from them any practical deductions; but I have appended Major Scott's explanatory letter together with an abstract of one set of the statements, which will convey an idea

of their nature and objects. A valuable map is also in progress of construction under Major Scott's superintendence, a large portion of which will, I hope, soon be completed.

Civil Justice.

37. Little change has been introduced in the agency and mode of administering civil justice since our acquisition of the Province, though it may be presumed its administration is more regular and pure than under the former Government.

Mode of administering it.

38 Parties who have disputes to settle, which they cannot dispose of amicably or by private arbitration—which however in the majority of cases they can—resort to the nearest Chief Officer of a district—with us, the European Collector or his Deputy, formerly, the principal Kardar. This officer exercises his discretion in disposing of the case, more or less summarily, or referring it to the Kazi or a Panchayat. The institution of suits, except under special circumstances, is now limited to the date of the conquest as regards real property, and to a few years previous to it (differently stated, probably under error, by the different Collectors) as regards running accounts or bond debts. The record of a suit, whether decided by a European Officer or a Panchayat, contains little more than the subject of it and the purport of the award; no pleadings or exhibits, and therefore nothing on which to form a judgment of its merits. An appeal is open to highest civil authority, but under no rules or limitation; and it is practically of little use, as in the absence of a detailed record there is no alternative but to reject it at once or go into the merits of the case from the beginning; and as the latter course would have the effect of bringing every suit eventually before the highest authority for trial, it has therefore been resorted to only in rare instances and on strong *prima facie* grounds for suspecting injustice.

Panchayats.

39. Panchayats are differently constituted according to the practice of the different Collectors. In Shikarpur they appear to be a sort of standing court of unpaid Judges composed of very unwieldy numbers; in Hyderabad and Karachi they are more of the nature of arbitration courts, in which the parties have a voice in electing the members, and the Government officer appoints an umpire.

40. Vakils are admissible, but there is no professional class of this description; parties usually conduct their own suits, unless their condition precludes them from appearing in person. Vakils.

41. A fee of 5 per cent. is levied on the value of suits, and the party by whom it is to be paid is determined, according to the merit of the suit, by the officer before whom it is brought. Costs.

42. The subjects of litigation are few and for the most part simple debts between cultivators and superior holders or money lenders, mercantile accounts, the use of water and boundaries of property, marriage and inheritance, and such like. Those of the last class are referred to Kazis or heads of caste; the others if not amicably settled, are diposed of by the Government officers, if simple, or by Panchayats, if complicated. Subjects of litigation.

43. Decrees are enforced by attachment of property or imprisonment but under no definite rules; much is left to the discretion of the Collectors in this respect. Enforcement of decrees.

44. Village boundary disputes are less frequent than in India; when they occur they are settled by methods similiar to those resorted to there, such as ordeal. Boundary disputes.

45. Caste disputes are not frequent and little or no interference is exercised in them by the officers of Government. Caste disputes.

46. A monthly return of civil suits is furnished by the Collectors, but the records kept by them in this branch of administration are too incomplete to afford satisfactory data for a full exhibition of its operation. According to a return framed by the Civil Judge Advocate-General from the records in his office, for the whole Province for the year 1846, the number of suits filed was 1,113, of which 606 or more than one half were bond debts. The aggregate value of the whole was Rs. 272,536; the number dismissed by default 56, and decided on their merits 1,057; the decrees enforced by imprisonment 59 and by distraint of property 16; the average period of suits remaining on the file 10 days and the number remaining on it Results of the administration of Civil Justice.

at the close of the year 5. Only one suit was appealed, and in that the decree was affirmed. These results, inasfar as any inference can be drawn from them, would indicate no great amount of litigation, and a speedy and efficient dispensation of justice.

Its character and suggestions for its improvement.

47. I am inclined to think however that more remains to be done in this than in any other branch of our administration. The existing system is obviously inartificial in the extreme, and although it may have worked tolerably well as a provisional expedient in the absence of a better, and where the business to be provided for was not of a very intricate nature, it can hardly be considered to afford, as a permanent measure, a sufficient provision for the regular and satisfactory administration of civil justice, even in the present state of society, much less as the need for it may be expected to increase with the progress of the people in wealth and civilization and the more complicated relations it brings with it. The resort to arbitration might continue to be left optional with suitors and rather encouraged than otherwise; but I apprehend we cannot much longer do without paid Native Judges for the decision of original suits, and two or three European Judges for their decision in appeal and for the control and direction of judicial proceedings generally, together with such rules for the institution of suits, and forms of record and process, as, while they introduce some degree of uniformity and system, may not be in advance of the state of the Province. If, however, the present system is to be continued it must be under some such regulations as are suggested by Captain Young, the Judge Advocate-General, and which seem judicious as a means of reducing it to the most efficient state of which it is susceptible.

Criminal Justice under the former Government.

48. The administration of criminal justice under the former Government, as in most partially civilised states, was arbitrary and unscrupulous, and therefore probably prompt and vigorous, but unequal, and better adapted to ensure the punishment of the guilty than the protection of the innocent. Its processes and punishments were often of a kind which would be revolting to our notions, and its object was rather private compensation than public example. In all of these respects it

was perhaps no worse than that of other States in the same stage of civilization, but there can be little doubt that it has much improved under us, and has more than gained in equitableness and regularity what it may have lost in vigour.

Under us.

49. Under us no Native agency, whether village or district, is employed in the administration of criminal justice in any of its stages, the duties of the Native District Officer in this Department are merely of an executive character, such as the apprehension of the criminals and summoning and examining witnesses and forwarding them to the Magistrates. The officers invested with magisterial powers are the Collectors and their Deputies within their respective districts, and the Captain of Police and his Lieutenants. The magisterial jurisdiction of the Captain of Police extends over the whole Province, that of his Lieutenants, of whom there are three, over divisions corresponding with the three Collectorates. In minor offences, within certain defined limits as regards the amount of punishment, the jurisdiction of the magistrates is final, and his proceedings are recorded in Persian ; in graver cases his proceedings are recorded in English, and are forwarded, direct if those of a Collector or the Captain of Police, and through his immediate superior and accompanied by his remarks, if those of a Deputy Collector or Lieutenant of Police, to the Civil Judge Advocate-General, for confirmation or mitigation, and are disposed of by that officer, either on his own authority or after obtaining, if he thinks it necessary, the orders of the highest civil authority in the Province. In the most serious class of cases the proceedings of the Magistrate are merely preliminary, the accused being brought to trial before a Court composed of three Military Commissioned officers, which is obtained for the occasion on a requisition from a Magistrate to the nearest Commanding Officer. The proceedings of these Courts are submitted through the Judge Advocate-General to the highest civil authority for confirmation.

Office of Judge Advocate-General and his deputies.

50. The Judge Advocate-General has two Deputies, one stationed at Shikarpur and the other at Hyderabad. These officers and their principal are charged with the general supervision of the regularity of judicial proceedings, and the

conduct of the prosecution in trials before Military Commissions The Judge Advocate-General also acts as a Judicial Secretary and adviser to the head of the Civil Government, and exercises a general control over all officers employed in the administration of criminal justice.

Forms of trial, classification of crimes and punishments.

51. The forms of trial are analogous to those observed in Military Courts. Witnesses are examined on solemn affirmation and liable to punishment for perjury. Crimes have been classified, and a scale of punishments established, which, while it forms a general guide, leaves a considerable latitude of discretion to the trying authority. The punishments are fine, imprisonment with or without labour, flogging, transportation (recently introduced) and death. The sentences are carried into execution under the authority of the officer by whom they are finally adjudged.

Prevailing crimes and their causes.

52. The principal crimes are murder, cattle and camel stealing, theft from houses by breaking through the walls, highway robbery, perjury and forgery, official malversation and embezzlement. Murder chiefly arises out of cases of adultery or jealousy: it is caused by the prevalence of infidelity and the former toleration of private retribution. The attempt to repress it by severe punishment under our Government has doubtless been in some degree effectual, but the crime is still sufficiently prevalent to show that it has been but partially so, and it has on the other hand led to evasion by attempts to make it appear that the victims have committed suicide; the attention of Government has been anxiously directed to the suppression of this crime and still requires to be so. The prevalence of cattle and camel stealing arises from the facilities afforded to it by the nature of the country and the pursuits of its inhabitants who are all more or less pastoral; though still more prevalent than any other crime, it has been considerably reduced under our more efficient system of criminal justice and Police. House stealing is not attended with aggravated circumstances: the prevalence of it may be traced to the facilities afforded by the insecure construction of the houses; both it and highway robbery, particularly the latter, have been greatly reduced by the activity of our Police. Perjury is common as in India, and

the forgery of documents perhaps more so. Official malversation has not been rare, but the severity with which it has been visited has doubtless had a wholesome effect in restraining it. The observations of the Judge Advocate-General on these points will be found intelligent and are based on an extensive official experience. It appears from a return furnished by that officer for the whole province for the year 1846, that of 2,076 persons brought to trial 1,290 were for petty offences; of the remaining 786, 401 or more than a half were for cattle stealing, 46 for murder and the remainder, in different, but, considered with reference to their heinousness, smaller proportions, for the other offences above alluded to as the most prevalent. Of the 786 brought to trial for the graver offences 708 were convicted. Of these 9 were execrited, 5 transported, 3 flogged, 10 fined and the remainder imposoned for various periods, it may be presumed with hard labour. In the petty cases the proportion of convictions was still greater, and in most of them the parties were punished with fine, flogging or imprisonment. The number of offenders was greatest in the Hyderabad Collectorate, but not relatively more so than in the proportion of its estimated population. These results, inasfar as any inference may be drawn from them, would seem to indicate a not very extensive prevalence or aggravated description of crime, when allowance is made for the local peculiarities already adverted to as affecting certain classes of offences, and a great degree of certainity, with no very inordinate degree of severity, in punishment, after apprehension. There are no data for estimating the certainty of apprehension, but from the general character of the Police for vigilance I should suppose it must be much greater than in most of our provinces.

53. No notice is taken of offences against morality, unless their circumstances are such as prominently to force themselves on the attention of the Magistrate. Adultery is an offence which the state of feeling perhaps requires to be more strictly visited by the Magistrate here than in most countries; the parties whose honour is affected by it are now severely punished if they take the law into their own hands, as was formerly the practice. It seems therefore right that the law should afford them what protection it can against a dishonour

Offences against morality.

the sense of which is very keen among them. There are, however, as I have already intimated, evils of another kind to be apprehended from over-severity The question therefore becomes a difficult one to deal with, and although requiring serious attention must be treated cautiously. The state of morality, as regards the intercourse of the sexes, is described as low. Truth is much disregarded except among the hill tribes. Drunkenness is uncommon. Indolence and improvidence are general characteristics.

Jails and Prison discipline.

54. There are three principal jails at the head stations of the three Collectorates, under the management of the Captain and Lieutenants of Police; also minor Jails for the custody of petty offenders at the stations of some of the Deputy Collectors, which are under the charge of those officers. In none of these is any classification attempted, beyond the separation of male and female, and civil and criminal prisoners. The subject of prison discipline generally has as yet received little attention, and is one in which I apprehend there is much room for improvement; but in order to do this more efficient establishments are necessary. The total number of prisoners in all the Jails in the Province on the 1st October last was 1,585. Of these 147 were awaiting or undergoing trial, chiefly the latter; 1,262 were undergoing sentence; none were detained for security; and 176 were prisoners of war, which last class has subsequently received an accession of 115. Nothing has yet been determined as to the ultimate disposal of the prisoners of war, but it is a question which requires early consideration.

Suggestions for future administration of Criminal Justice.

55. Although the administration of criminal justice since our acquisition of the country has been greatly better than it ever was or could have been under the former Government, and may be considered on the whole in no inconsiderable degree to have attained its ends, yet it would be very desirable gradually to subject it to greater regularity and uniformity. The disposal of minor cases might be entrusted to the Native District Officers. If two or three European Judges were appointed for the administration of Civil Justice they might also discharge the functions of Session Judges in the Criminal Branch as under the Bombay Presidency, the same extent of criminal

jurisdiction as in that Presidency being reserved to the Collectors and their Deputies and to the Police Officers as Magistrates. If the appointment of Judges be deferred, the Collectors could, until that arrangement were introduced, be vested with the powers exercised by those officers, as was the case for some time after our acquisition of the Deccan; but I doubt if this would be found satisfactory or compatible with the due discharge of their other duties. In either case, the agency of Military Commissions in the administration of criminal justice and the offices of Judge Advocate-General and his deputies might be dispensed with. As regards the forms of procedure and the definition and classification of crimes and punishments, I do not perceive that there would be any objection to the immediate adoption of the general principles of the Bombay Regulations in the Criminal branch, leaving at first a considerable latitude of discretion to the administrative officers in modifying their application with reference to the local peculiarities of the country and its inhabitants. This course was followed on the original appointment of Session Judges and introduction of our regulations into the Deccan, and was found to answer its purpose in preparing the way for their more general and authoritative observance. The superintendence of jails and regulation of jail discipline would, in the event of such arrangements taking place, naturally devolve on the Session Judges as in the Bombay Presidency.

Police under the former Government.

56. Under the former Government no regular Police establishments were kept up except in a few of the larger towns. The Police of the country generally was left to be provided for by the Kardars and Jagheerdars with such means as they had at their disposal for other purposes; in practice it was corrupt and inefficient, although, as in other branches of administration, there were doubtless occasional exceptions arising from the personal character of the administrators. The absence of hereditary village establishments, such as are known in India, would probably be even more felt in this than in the Revenue Department.

Police under us.

57. Under our Government the general control and direction of the Police of the Province is entrusted to the Captain or Superintendent of Police who has three Lieutenants

under his orders as already stated in adverting to their magisterial functions. This officer reports direct to Government in all matters relating to his charge, and is subject to no intermediate authority. The executive force at his disposal consists of 838 horsemen, and 896 partially disciplined and 476 undisciplined footmen; in all 2,210. This force is considered on the whole very efficient of its kind, but the Captain (Lieutenant Marston) is of opinion that the composition of some of its branches might be improved by a larger admixture of native Baluchees. The internal peace of the country, beyond the limits of our military stations and frontier posts, is entirely maintained by the Police force. In all points of discipline this force is subject to its own officers only, but its services are available to the Collectors and their Deputies, in their magisterial capacity, for executive purposes. So far as I have yet had an opportunity of observing, this police is remarkably good, both as respects the collection and transmission of intelligence, the prevention and detection of crime, the pursuit and apprehension of offenders and the general maintenance of good order and security of person and property. In the pursuit and apprehension of offenders they receive the most efficient aid from a class of persons to be found in every village whose profession it is to track footsteps. Some remarkable details illustrative of the expertness of these persons will be found in the reports of the local officers, particularly in that of the Civil Judge Advocate-General; it exceeds anything of the kind I have heard of in India, and is doubtless much favoured by the nature of the soil and climate. The inhabitants generally are also bound to afford the Police every aid in their power, and are liable to fine for any neglect to do so.

Its excellence.

58. On the whole I am inclined to think we have been more successful in this than in any other Branch of our administration in this Province, and that it has been brought into a state of organization quite as efficient, perhaps more so than is to be found in many provinces much longer under our rule, and which leaves little room for improvement.

Suggestions for the future.

59. It might however facilitate the details of Police management if a head man were formally appointed to each

village, and I am of opinion that most of the general provisions of the Bombay Code in this branch might with advantage be adopted for the guidance of village and district police officers.

60. The trade of the Province is considered to have increased under us, as it was natural it should do with the greater encouragement afforded by our system of customs and the greater security of person and property under our administration of criminal justice and police. It is still however far from considerable. The returns of the Collector of Sea Customs make it appear that the value of the imports by sea had risen between 1843 and 1846 from 20 to 45 lacs, and that the exports had been originally not more than 4 lacs in value and had increased not quite to $4\frac{1}{2}$ lacs. The returns for the earlier years of the period however are considered of doubtful accuracy. The above results, as indicative of the permanent resources of the country, will appear still more inconsiderable when the large excess of imports over exports is adverted to in connection with the circumstance of the demand for the consumption of our military force having contributed materially to swell the former and that it has undergone a diminution consequent on the reduction of the force. The returns of the Collectors of Land Revenue are not sufficiently complete to admit of an accurate estimate being formed of the trade across the land frontier, but so far as an inference can be drawn from them they would not seem to indicate at present a much more important state; the transit trade with the interior however is advancing, and is thought to be susceptible of considerable improvement; at present it proceeds chiefly by land. The measures taken by the late Governor for encouraging the river traffic by the aid of steam do not as yet appear to have had a very extensive effect, but they may be more availed of when their operation comes to be better known. The point requiring most attention in the landward trade is to endeavour by negotiation with our neighbours to prevent them and their feudatories from increasing their imposts and obstruction as we diminish ours, but this is a matter of some difficulty. In the towns of Shikarpur and Hyderabad foreign bills may be negotiated to a considerable amount, but generally speaking the transactions of the monied classes are not extensive, and

Trade.

few of them are supposed to be possessed of much wealth. The trade of Karachi (the only seaport worthy of mention) has increased as compared with that of the neighbouring foreign ports: the number of vessels entering last year was 999 and departing 1,097; the tonnage of the former 34,209 and of the latter 38,046. The number of vessels belonging to the port was 319 and their tonnage 2,564. The trade of this port may be expected to go on increasing with the closer connection in Government between the Province and the Bombay Presidency, and the establishment of regular steam communication with Bombay must also tend to the same result. The opinions and suggestions of the local officers as to the best means of improving the commerce of the country are deserving of attention and may hereafter receive more specific notice. At present it is sufficient to refer to them as forming a valuable portion of the general collection of information.

Manufactures.

61. There are few manufactures of any importance in the Province; the principal one is that of leather for which there is some demand for exportation. With the character for docility attributed to the people, however, there is doubtless a considerable field for improvement in manufacturing skill.

Public Works.

62. Among the documents in the appendix is a list of the principal public works, executed or in progress and projected since our acquisition of the Province, exclusive of works of irrigation. The aggregate cost of those actually completed in all departments is Rs. 12,87,185, of which Rs. 11,17,810 is for works in the Military Department and the remainder Civil and Miscellaneous. The estimated cost of those projected and in progress is Rs. 15,17,793 Of these last the most important in the Civil Department is the Mole at Karachi, a work much wanted to facilitate the landing of goods and passengers, which is at present an operation of some difficulty. There are other works not included in this list which have been under consideration, and which it would be desirable to undertake as funds and opportunity permit, but to these it is not necessary to advert more particularly at present.

Indus Flotilla.

63. It was my wish on this occasion to have noticed the state and services of the Indus Flotilla, but the necessary

information has not yet been received from the Officer Commanding that branch of the service. He however informs me that it is under preparation and will soon be submitted.

Military administration.

64. As the Military administration of the Province is not under my control, I must leave it to the authorities in that department to furnish any information that may be desired in respect to it.

Financial administration.

65. I regret that I am not in possession of the material which would enable me to give a complete exposition of the financial state of the Province and its progress since it came into our possession, there being no provincial department of accounts and everything connected with the branch of the administration having been conducted in the office of the Accountant-General at Calcutta The only information to be had here on the subject is derived from the statements of actual receipts and disbursements furnished by the local officers, but these are in some respects defective for the purpose of a complete and accurate financial exposition. Such as they are, abstracts of their contents for the four years the country has been in our possession will be found among the documents in the appendix. The first of these years is incomplete and the state of things at that time was too unsettled to admit of any satisfactory deductions being drawn from its results. Excluding that year the following is a summary of the receipts and civil disbursements under all heads for the three subsequent years :—

—	Receipts.			Disbursements			Surplus.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1844-45 ...	26,42,368	15	0	12,25,027	11	1	14,17,341	3	11
1845-46 ...	30,99,494	0	3	15,32,077	10	1	15,67,416	6	2
1846-47 ...	25,96,720	8	3	16,81,056	10	4	9,15,663	13	11
Total ...	83,38,583	7	6	44,38,161	15	6	39,00,421	8	0
Average ...	27,79,527	13	2	14,79,387	5	2	13,00,140	8	0

This shows an average annual surplus of receipts to the amount of about 13 lacs. The balance would doubtless be turned considerably on the other side if the military charges were included, but I have no data for giving these with any degree of accuracy; and it might be a question of some difficulty to determine what portion of them are fairly debitable to this Province alone. The above may however I think be considered as affording a moderate estimate of the probable future financial value of the Province, exclusive of any permanent military charges which its maintenance may involve and which would not, on a fair consideration of all the circumstances, have been necessary without it. The nature of the revenue makes it liable to considerable fluctuation; but there is every reason to look for a gradually progressive increase in its average amount; and also from the lapses of alienated lands. Some additional charges may be incurred in bringing the civil administration into a form more analogous to that prevailing in our other Provinces; but when the whole of the establishments come to be reorganized with that view, I do not apprehend that it will be considerable or more than is likely to be met by the improvement in the revenue. Among the documents in the appendix, is a list of European Officers at present employed in the Civil branch of service with the amount of their salaries. Their reorganization in the form of Judges and Collectors on the scale of the Bombay Presidency would cause considerable alterations in the details, but might perhaps be effected without any great increase in the aggregate amount of charge. The whole system of financial details and accounts will require to be remodelled to bring it into conformity with the practice of the Bombay Presidency, and no time should be lost in effecting this under such instructions as may be necessary for the guidance of the local officers of account and audit.

General characteristics of the people; their social relations and feelings towards our Government.

66. I now proceed to notice a few of the more prominent points bearing on the general character of the people, their social relations, institutions and feelings. The moral influences in operation for the maintenance of social welfare, as considered apart from those based on legal sanction, do not appear to be very extensive or powerful. Muhammadanism is the dominant religion, but it received little direct support in the way

of state endowment from the former Government; the funds for its maintenance were derived chiefly from individual devotion or superstition, and now of course it receives none it had not before, although former grants are respected; the regulation of its observances is entrused to the Cazis and Moolas, and there appears no want of respect for its external forms, whatever may be its practical influence. Hinduism was in this country a foreign religion and therefore even less likely than the other to receive state support; its professors may have been politically less favoured than those of the faith which numbered among its followers the family of the ruling dynasty; but although occasional instances of forcible conversion are said to have occurred, they appear in general to have been allowed to follow their own customs without persecution or molestation; their discipline is in a relaxed state as compared with what it is in India proper; such as it is, its enforcement is left to Panchayats or heads of caste. The powers of husbands, parents and guardians were extensive under the former Government, and are still maintained, as far as they can be so consistently with justice and our laws, but they seem to have worked rather by stern than gentle means, and to have done little towards elevating the moral or social character of the people. The Syeds are the class who possess most influence in the country, from the personal sanctity assigned to them by their religion; fakeers and devotees of all kinds are also respected from similiar causes. Jagheerdars and heads of clans have considerable influence within their limits and tribes. The Baluchees had an advantage over the other classes of the population under the former Government, as being that to which the ruling family belonged; and the feeling of self-importance thence derived appears still in some degree to characterise them. The system of clanship and the usages of tribes in their intercourse with each other, their alliances, feuds and friendships, very closely resemble that formerly prevailing in the highlands and borders of Scotland and that described by Mr. Elphinstone as prevailing in Kabul; it exercises an extensive influence over the social relations of the people, particularly among the inhabitants of the hills; and to those who are curious in tracing the progress of human society, its details might form an interesting subject of research as illustrative of

the tendency to fall into the same forms in similiar circumstances and stages of civilization, however wide the separation in point of locality. There were not, under the former Government, nor have there as yet been under us, any educational institutions supported by the State, but private schools, in which reading and writing is taught, are common. Persian is chiefly studied by the Muhammadans and by those who aspire to official employment, and Sindhi by the Hindus and persons engaged in trade; the former was the language of the official business, the latter in its various dialects is the common language of the country. It would seem desirable that early measures should be adopted for extending the same encouragement on the part of Government to education as in our other Provinces. It may also be for consideration whether the vernacular language of the people may not with advantage be introduced in business, but I have not yet had an opportunity of ascertaining its capabilities for this purpose. The people generally are not badly off for the necessaries of life as measured by the standard prevailing in eastern countries, and that they are not better is more owing to their own want of industry and enterprise than the circumstances of their position. The effect of the change of Government on the various classes, and the feelings engendered by it, are such as are found to exist in all countries which have undergone similar revolutions. The mass of the people, the middle and working classes, have decidedly gained, in security of person and property, relief from oppression, reduction of taxation, and liberty to follow their own pursuits in their own way; nor is there reason to think that they are backward in appreciating these advantages, though their sense of them, as is usual in such cases, is rather to be inferred from the negative evidence of absence of complaint than any distinct acknowledgment. The men of rank and political influence, and their followers, the soldiery, the classes who lived on the unproductive expenditure of a Court, those who enjoyed religious immunities and such like, have no doubt been losers, some in wealth and more in power and importance; it is therefore natural that they should look with no favourable eye on the state of circumstances which have led to such a result. It is not however thought that any of them as a class would be disposed to engage in active measures for

the subversion of the present order of things, and it is believed that our Government enjoys the respect of all, though it may be the affection of none. Some points in the moral character of the people have already been alluded to under the head of criminal justice, in other respects the representations of the local officers, whose position affords them opportunities of observation, do not make it appear on the whole unfavourably as compared with that of the inhabitants of our other provinces. All indeed except the hill tribes, and Hindu traders in matters affecting their mercantile credit, are described as little regardful of truth, though perhaps not less so than other natives of India. The Hindus in official employ are said to be indifferently honest, but diligent and liberal and free though not intemperate livers; those of the trading class more penurious. The Muhammadans of the higher classes are generous and warlike, but overbearing, debauched, and idle. The lower orders, generally, are sober, docile and intelligent, not remarkably industrious, but on the whole affording good materials for moral improvement.

Political condition of the Province

67. It is unnecessary, and might be inexpedient on the present occasion, to enter in detail into the circumstances affecting the political condition of the Province, both because the personal experience I can bring to bear upon it is as yet so limited, and the questions it involves are of a kind which may be more conveniently discussed in separate form as they arise for practical consideration. Full information has however been obtained from the local officers regarding the leading families and men of rank and influence, their history, connections and character, and the policy which has been adopted towards them. The reports of those officers will be found among the documents appended to this despatch, and to these I would beg to refer as containing all that it seems desirable on the present occasion to know, and as furnishing useful matters for future reference. So far as I have been able to ascertain, there seems little to apprehend at present from internal intrigue or disaffection; the former seat of Government is the locality where, if any, it might be looked for, and there the vigilance of the local authorities is on the alert to watch any indication of such a feeling. The general course of policy to be observed

towards men of rank and influence will naturally be, as it appears hitherto to have been, to treat them with courtesy and consideration and to extend to them every indulgence which may tend to soothe and conciliate their feelings without endangering our political security. As connected with our external policy the most important question at present is that relating to the treatment of hill tribes on the frontier, but recent events having made this the subject of separate correspondence I need not advert to it more particularly on the present occasion.

Documents in the appendices.

68. It only remains for me to solicit attention to the documents appended to this report as enumerated in the annexed list. These will, I trust, be found to contain much valuable information and to be very creditable to the intelligence of the officers by whom they have been furnished. To all of those officers I have to acknowledge myself indebted for the alacrity and zeal with which they have aided me in the prosecution of my enquires; and in this, as in everything belonging to the civil administration, I have received the most cordial and able assistance from the Secretary to this Government, Captain Brown, although, from its having been chiefly in personal communication, his name does not appear among the contributors to the documents now submitted.

Conclusion.

69. I hope it will not be considered in excess of my province if, in concluding this report on the civil administration as I have found it to exist, I take occasion to express the sense with which my equiries have impressed me of the wisdom and energy and ability with which it has been organized and directed by His Excellenoy the late Governor Sir Charles Napier, under the circumstances of considerable novelty and difficulty.

I have the honour to be,

Sir,

Your most obedient servant,

(Sd.) R. K. PRINGLE,

Commissioner in Sind.

Karachi, 31st December 1847.

List of documents in the Appendix.

*A.—Memorandum of the Commissioner for the guidance of the Secretary, dated the 9th October 1847.

†B.—Replies to revenue queries by the following officers :—

Captain Rathborne, Collector of Hyderabad.

Major Goldney, Collector of Shikarpur.

Captain Preedy, Collector of Karachi.

‡BBB.—Memorandum on pearl banks and fishery. Sea fishery and Salt deposits.

C.—Memoranda of Major Blenkins relating to Public gardens.

D.—Report of Major Scott, Superintendent of Canals and Forests.

E.—Letter from Major Scott, with extract exemplifying his tabular statistical statements.

F.—Replies to queries on civil justice by the following officers :—

Captain Rathborne, Collector and Magistrate, Hyderabad.

Major Goldney, Collector and Magistrate, Shikarpur.

Captain Preedy, Collector and Magistrate, Karachi.

Captain Young, Civil Judge Advocate-General.

G.—Replies to queries on criminal justice by the following officers :—

Captain Rathborne, Collector and Magistrate, Hyderabad.

---

* Not printed.

† Printed as selection No. II from the records of the Commissioner in Sind.

‡ Printed in Part II, No. XVII, New Series, of the selections from the records of the Bombay Government.

Major Goldney, Collector and Magistrate, Shikarpur.

Captain Preedy, Collector and Magistrate, Karachi.

Captain Young, Civil Judge Advocate-General.

Lieut. Marston, Officiating Captain of Police.

H.—Replies to queries on Police by the following officers:—

Captain Rathborne, Collector and Magistrate, Hyderabad.

Major Goldney, Collector and Magistrate, Shikarpur.

Captain Preedy, Collector and Magistrate, Karachi.

Captain Young, Civil Judge Advocate-General.

Lieut. Marston, Officiating Captain of Police.

I.—Replies to queries on trade and manufacture by the following officers:—

Captain Rathborne, Collector and Magistrate, Hyderabad.

Major Goldney, Collector and Magistrate, Shikarpur.

Captain Preedy, Collector and Magistrate, Karachi.

Mr. Macleod, Collector of Sea Customs.

*K.—List of public works furnished by Major Peat, C.B., Superintending Engineer.

*L.—Statements of the actual receipts and civil disbursements of the Province for the years 1843, 44-45, 45-46, 46-47 prepared in the Secretary's office.

* Not printed

*M.—List of all officers covenanted and uncovenanted in civil employ in Sind.

†N.— Replies to general queries by the following officers :—

Captain Rathborne, Collector and Magistrate, Hyderabad.

Major Goldney, Collector and Magistrate, Shikarpur.

Captain Preedy, Collector and Magistrate, Karachi.

Captain Young, Civil Judge Advocate-General.

Captain Anderson, Deputy Judge Advocate-General.

‡O.—List and reports on the men of influence and rank in the Provinces by the following officers :—

Captain Rathborne, Collector and Magistrate Hyderabad.

Major Goldney, Collector and Magistrate, Shikarpur.

Captain Preedy, Collector and Magistrate, Karachi.

Lieut. Forbes, Resident at the Court of His Highness Mir Ali Moorad, Khairpur.

Karachi, 31st December 1847.

* Not printed.

† Printed as selections Nos. VI to XIII from the records of the Commissioner in Sind.

‡ Printed in Part II, No. XVII, New Series, of selections from the records of the Bombay Government.

Selections from the Records of the Commissioner in Sind.

SELECTION No. II.

Revenue queries by Mr. R. K. Pringle, Commissioner in Sind, to Collectors in Sind, and replies thereto.

(Accompaniment to the Commissioner in Sind's report on the administration of Sind, 1847.—Section No. I.)

Revenue Queries by Mr. R. K. Pringle, Commissisner in Sina.

Query No. 1 —What are the boundaries and natural features of your Collectorate: the general character of its soil and climate; its principal products; estimated length in square miles, estimated amount of population; classes of which the population is composed; average annual revenue since the country came into our possession and from what sources derived?

Captain Rathborne, Collector of Hyderabad.

1. The Hyderabad Collectorate is bounded on the north by the Khairpur State, on the east by Rajputana, on the south by the Runn of Cutch and on the west by the Indus. To the south-east however a portion of desert once in the Hyderabad Collectorate is now under the Resident at Bhooj, and forms the Deputy Collectorate of the Thar and Parkar. To the north and east of Hyderabad as far as Mirpur the country is a dry sandy soil intersected by large canals. Beyond Mirpur to the eastward is the desert—to the south are rice grounds intermixed with large salt plains.

The soil to the north and east of Hyderabad is almost uniformly productive wherever reached by water—to the south the soil is salt but a large portion of it is well adapted for rice cultivation. The climate to the north of a line drawn from Muhammad Khan's Tandra is good—south of that it is in the innundation season bad—at other times healthy. The principal products of the Collectorate are bajri and juari and rice—with a small portion of wheat and barley; the probable number of square miles in this Collectorate may be about 30,000; the probable amount of population of this Collectorate I should suppose to be about 7,00,000; but on this point I am very uncertain. The population is composed of Sindhis, Hindus and Baluchees. The first class amounts, including Jutts, to about 3/5ths of the whole and the other two classes to about 1/5th each. The average annual revenue since the first year after the conquest which was one of war, has been 10,68,545. The sources whence this revenue was derived were land, town duties, fisheries, abkari, goldsmiths' tax, house rent, auctions, taxes, gardens, customs, miscellaneous items and water tax.

Town duties and taxes have been now abolished, but the deficiency so caused is made up or nearly so by the great increase in the abkari revenue and customs.

Major Goldney, Collector of Shikarpur.

1. Upper Sind extends from Moondhur (24 miles north of Sehwan) in the south—to Kasmore on the frontier of Mooltan to the north, on the west lies the desert, on the east the Indus—Rohri and Ghotki on the left bank of the Indus belong to it—on the other hand Boordika and petty dependencies on the right bank belong to His Highness Mir Ali Murad.

The surface is level, portions abound in ponds, the greater part is intersected by the large feeder canals and innumerable cuts from them.

The climate is extremely hot from 1st May to 1st September The autumn months are unhealthy, and in 1844, the winter months upto the middle of January, were extremely so—the winter is more severe than that of Hindustan—rain is so rare that it cannot be depended upon for tillage.

The products are agricultural: if any minerals, salt and alum, the former is obtained by evaporation.

Soil alluvial with salt deposits at intervals.

I estimate the extent at 6,120 square miles, the population at 2,50,000 composed as follows, 24 to the square mile, for agricultural districts:—

Cultivators	1,50,000
Fishermen and boatmen	15,000
Herdsmen and camel owners and other squatters, Baluchees and Jutts.	15,000
Hindus, Merchants and Bankers, &c., in the large towns.	70,000
Total ...	2,50,000

Besides the troops and military bazars. The annual revenue on an average of the three complete years, *viz.*, 1844-45, 45-46 and 46-47 amounted to 10,66,000. The sources of the revenue are detailed as follows:—

Memo. of average amount of revenue collections under their respective heads in the Shikarpur Collectorate.

Particulars of revenue.	Amount.		
	Rs.	a.	p.
Land Revenue	8,10,592	6	8
River Customs	6,117	12	8
Taxes	16,464	14	6
Custom duties	1,33,209	9	7
Fishery contract	18,248	12	6
Liquor and Drug contract	22,178	10	8
Fees and fines	32,755	9	4
House rent	535	15	4
Miscellaneous	4,767	10	7
Garden rents	17,076	4	10
Confiscated and unclaimed	1,656	14	4
Refunds	2,743	14	5
Total average ..	10,66,348	7	5

The broken period of 1843-44 immediately following the conquest has not been included because from the unsettled state of establishments, transfer of districts and incomplete system, the amount of revenue collected during that period would give no criterion for estimating the resources likely to be derived from the country. Its amount, however, I state for the Commissioner's information, *viz.*, 3,56,675.

Captain Preedy, Collector of Karachi.

1. The boundaries of the Karachi Collectorate, are on every side, except the north, well defined by great and durable natural objects, *viz.*, on the south by the Arabian Sea, on the east by the River Indus, and on the west, by the Hubb river

and a mountainous district, inhabited by a small tribe of Brohees, subjects of the Khan of Kelat. The northern boundary is merely an imaginery line, drawn about forty miles north of Sehwan, between the Purgunnahs of Mahir and Baghbhan, which belong to the Shikarpur Collectorate and those of Dadu and Kacha which are included in this Collectorate. The area within these limits is about 240 miles long by about 70 broad. In so wide a space, the soil is of course considerably diversified; that within the influence of the innundation is exceedingly fertile, being for the most part composed of rich alluvial deposit containing scarce a stone or pebble of any size, it varies in colour from light grey or dirty white to a deep brown, the former being considered the best soil. In many places this soil is so much impregnated with salt and nitre, that in the several of the Purgunnahs, extensive plains are found thickly encrusted with one or both of these substances. These salt and nitre plains are usually found in situations which lie too high to benefit by the inundation. The same substances are however frequently met with on the lands in the immediate vicinity of the river. As in Egypt, the cultivable lands nearest the river are in many parts of the country higher than those which are more distant. In Egypt this is attributed to the former being cultivated throughout the year while the latter, yield but one crop; the accumulation of stubble and manure from constant cultivation in a long series of ages being supposed to account for the difference of elevation. This however cannot be the case in Sind, as the lands nearest the river are in general the most neglected, on account of the additional expense of irrigation, two wheels being necessary (one below and the other above), to raise the water to the top of the banks.

The Collectorate is divided into three large districts and these again are sub-divided into Purgunnahs. Each district is under the superintendence of a Deputy Collector and each Purgunnah is superintended by a Kardar.

The first division, that of Ghorabari, extends from the sea upwards to the spot whence the Buggar Branch of the river quits the main stream about four miles south of Tatta. Its

boundaries are the Buggar river and the high road which runs between Garrah and Tatta on the north, the sea on the south and south-west, the Indus on the east and Garrah creek on the west and north-west. This district is sub-divided into five Purgunnahs of unequal extent, *viz.*, Ghorabaree, or Kukkeralla (possibly the Croncola of Arian)—

Sakra.

Syatree.

Garka.

The 2nd division, that of Jurruck, extends from the right bank of the Buggar river to the village of Sunn on the Indus.

It is bounded on the north by the Purgunnah of Laki, on the south the Buggar and Tatta road, on the east by the Indus, and on the west by the Hubb river. It is sub-divided as follows into the Purgunnah of Beronath of Tatta—

Seeree.

Jurruck and Sondah.

Kotri, Kanote and Bhea.

Mahajandah.

The 3rd division, that of Sehwan, extends from the village of Sunn, which is included in its limits to the southern boundaries of Shikarpur Collectorate. It is bounded on the north by Shikarpur Purgunnahs of Baghban and Mahir, on the south by the Mahajandah Purgunnah, on the east by the Indus, on the west by the Hubb river, and the mountanious tract inhabited by the Brohee tribe before mentioned. It is sub-divided as follows into the Purgunnahs of—

Luckee.

Sehwan, Kurnepur and Bangeusoff.

Boobuk.

Samtanee.

Kacha Phulji Division.

Kacha Mullar Division.

Dadu and Murkapoor.

Khudabad, Talti and Whichola.

GHORABARI DISTRICT.

The Ghorabari district forms a considerable portion of what is termed the Delta of the Indus, and with the exception of a clump of lime-stone hills of no great extent or elevation at Pir Patha in the Purgunnah of Syatree, is one vast alluvial plain, in many parts of great richness and fertility, in others covered with salt and nitre and entirely unproductive of vegetation. It is intersected by three large branches of the Indus, *viz.*, by the Buggar, the Chogla or Ochta, and the Syan, while the Sata or main stream of the river sweeps along its eastern boundary. The three former are navigable during the inundation, but during the rest of the year, are partially dry. Numerous canals convey the water of these streams in every direction, while extensive bunds are constructed along their banks to restrain the waters of the inundation within due bounds.

Much labour and expense were incurred by Mir Muhammad in the improvement of some parts of this district, specially in the Purgunnah of Sakra, where a vast number of canals, communicating with the Baggar which was then the main branch of the river were excavated. Unfortunately however the river in a few years changed its course, and the greater part of these canals are now comparatively useless. The Purgunnah of Garka contains an extensive forest; the timber growing in it is chiefly babool, and of no great value. Red and white rice, bajri, Indian corn, nangli, jhill, sugar-cane, turmerick, tobacco and esculent vegetables, are the principle products of this district at the kharif or autumnal harvest—as mung, barley, muttar, maize, jambha, and mustard are at the rubi or spring harvest.

The climate varies considerably in different parts of the district. On the sea coast it is generally mild during the hot

season owing to the prevalence of the sea breezes, and the thermometer in the shade at noon seldom rises above 85°. There are no periodical rains in Sind, but any unusual heat is generally followed by a torrent of rain. During the continuance of the south-west monsoon, the sky in lower Sind is usually overcast, which renders the climate very agreeable. The heat in the interior of the district is during the day considerably greater than on the coast, but the nights and mornings are always cool. After the inundation, *i.e.*, during the months of October, November and December, dense exhalations arise from the moist soil, which are considered highly injurious to the health of those who are exposed to them, causing fevers, rheumatism, &c.

The estimated length of this district is about 70 miles and the breath about 50, the amount of square miles consequently is about 3,500.

The estimated amount of male population is about 15,288, which being multiplied by 4 for the families would give 61,152 as the entire population of the district, or not quite 18 to the square mile.

The population is of a mixed character, but may be divided into three great classes, *viz.*, traders, agriculturists, and fishermen; the first class is chiefly composed of Hindus, either natives of Sind or Cutch, and the two latter which are by far the most numerous, of Muhammadans. The artificers such as blacksmiths, carpenters, and potters are few in number and are all dependent for their support upon the cultivators, who pay them in grain at harvest time for the services they have rendered during the year in the repair of the agricultural implements.

JURRUCK DISTRICT.

The Jurruck district differs considerably in its natural features from that of Ghorabari, commencing at the Buggar river on the southern extremity, a valley of rich cultivable land, varying from a few yards to ten miles in width and running

nearly due north, extends along the Right Bank of the Indus to the Luckee pass. This fertile tract is bounded by an undulating district, with ranges of hills running in irregular directions, interspersed with wide extended valleys, which contain a rich and fertile soil, but which are for the most part entirely dependent on rain for their supply of fresh water. This district commences at Cape Monze on the sea-coast, south of Karachi and is about 150 miles in length by from 60 to 70 in breadth. It, at present produces little except grass but wherever water can be found, the soil in the valleys is capable of producing almost anything. After heavy rain, the valleys are partially cultivated with bajri and jowari The Seree and Sondah Purgunnahs each contain an extensive lake—that in Seree, denominated the Kunjore lake, is the larger of the two, and is about 10 miles in length by 3 in breadth. There are also five extensive forests included in this district which occupy a considerable portion of the cultivable land. The soil in the valley of the Indus is rich and shiny, and like that of Ghorabari, it contains a large quantity of nitre. The Bharrun river and numerous smaller streams intersect the hilly district but, excepting after heavy rain, few of these contain water in their beds, although good water is usually found a few feet below the sandy surface. When heavy rains fall these dry beds are filled by foaming torrents, but the water runs off in a few hours and leaves them dry as before. The banks are usually high and near the river, are much channelled by nullahs, which renders cultivation difficult. In the valleys of the Hubb, Mulleer, and Bharrun rivers, there is however much rich land available for cultivation. In the first range of mountains opposite the towns of Manjhand is the fortified position called Runnee or Mohunkote, for a description of which I beg to refer the Commissioner to my report dated 11th July 1844.

The products of this district in addition to those of Ghorabari, are wheat, indigo, cotton, and bhang. The Sindian agriculturists have an idea that the soil and climate south of Jherruck are not adopted to the cultivation of the above four articles and state that the heavy dews discolour the grain and destrory the plants, rendering the produce of both of little value in the market.

The thermometer in this district rises considerably higher in the hot season and falls proportionately lower in the cold than in that of Ghorabari—the climate is however much healthier than that of the latter.

The estimated length of this district, including the Purgunnah of Luckee (which although included in that of Sehwan, is more allied to this in natural features, climate and products) is about 150 miles by 70 in breadh. The extent in square miles, will consequently be about 10,500.

The estimated amount of male population residing in the cultivated valley of the Indus, is about 16,859 and of wandering tribes inhabitating the hilly region, about 9,400—total 26,259—which multiplied by four for the families gives a total of 1,05,036

The mass of the population in the cultivable lands like that of Ghorabari is divided into three classes—*viz.*, traders, agriculturists, and fishermen—the great majority of the first class being Hindus and of the two latter Muhammadans.

The City of Tatta contains a few silk and cloth weavers and embroiders. It could formerly boast of its thousand looms all actively employed, but the produce of these has for the most part been superseded by the superior produce of English capital and machinery. Tatta was also famed for its glazed pottery, but the knowledge of the art of glazing is now confined to one or two persons only, whose productions are very inferior to those of their ancestors. A few dyers, weavers, tanners and salt manufacturers, with carpenters and smiths, are found in most of the large villages and saltpetre of an inferior quality is manufactured to a considerable extent, both in Tatta and in Runneekote. There is also an extensive manufacture of coarse kind of allum called phoolee in the latter place. The wandering tribes who inhabit the hill districts are all Muhammadans and consist of Jokhyas, Naomurdees or Noomryahs, Gubbol, Baluchis, Cosiahs, and Rhinds. A few Bunyahs sojourn amongst them and supply them with dates, tobacco, rice and other grain, which articles they exchange with them for ghee,

wool and gums; the latter are collected in large quantities from the khar, or species of acasia, and the googul, a low aromatic shrub which grows in great profusion about the hills and plains.

Sehwan or Sehwistan District.

This district, although resembling the other two in some of its natural features, differs materially in many respects from both. Its most southern Purgunnah, that of Luckee commences at the village of Sunn, and extending to the Luckee pass, a distant of about 24 miles, form as has already been stated, a continuation of that rich valley in the Jherruck district, which lies between the Hill country and the river. Opposite the village of Sunn, the mountains gradually commence to close in upon the river, until at the Luckee pass, there is barely room for a laden camel to pass. Even this narrow defile is closed during the inundation and the traffic between Upper and Lower Sind on the right bank of the river, is carried on by a difficult road, between six and seven miles in length, which leads over the mountains. Beyond the pass the mountains again suddenly recede from the river, and on emerging from its northern extremity, the eye wanders with delight over the wide, extended and fertile plain of Sehwistan. This plain is bounded on the east by the Indus and on the west by the Hubb or Solyman range of mountains—the Nara river meanders through the middle of the plain, and by its numerous windings, adds greatly to its fertility, by affording greater facilities for irrigation. Numerous canals, both from the Indus and the Nara intersect the plain lying between the two rivers and which is for the most part composed of an exuberantly fertile soil. Towards the southern extremity of the district, is situated Lake Munchar, a wide expanse of water and Morass, varying according to the season of the year from 20 to 30 miles in length and from 8 to 12 in breadth. The Nara enters the Lake near its northern extremity, while the Arul connects it with the Indus below Sehwan. The level of the surface of the Lake, when the Indus is low, is somewhat higher than that of the River, and as the lake contains numerous springs, there is usually a small flow of water through the Arul to the river. When on the

other hand the inundation commences, the river rises so much more rapidly than the lake can fill, that the water pours into it both through the Nara and the Arul. As soon as the lake is full, the Arul resumes its course towards the Indus. Both the Nara and the Arul are navigable during the inundation for boats of large burden, and even for steamers. To the westward of the Nara the land gradually rises towards the mountains; canals have in consequence been extended but a a short distance in that direction, and the vast plains of kacha are as yet almost entirely dependent on rain for their supply of fresh water. Numerous small bunds have been thrown up on these plains for the purpose of catching and retaining the rain water, and such is the fecundity of the soil that one good fall of rain is sufficient to enable the cultivators, with the aid of these bunds, to realize a good harvest of jowari. A fine mountain stream called the Gaj river, breaks from the hills and enters the plains about 30 miles north of Sehwan, fertilizing in its course a considerable tract of land. There are also other smaller streams, but unfortunately the greater portion of the water derived from these, as well as from the Gaj is claimed by Jagirdars. When heavy rain falls in the mountains the Gaj is subject to tremendous inundations called 'Raes' which sweep everything before them. Huge blocks of stone are rolled for several miles into the plain, and so impetuous and overwhelming is the torrent that it often fills up the canals dug to the westward of the 'Nara' and which are distant at least 15 miles from it.

The principal kharif products of this district, are red and white rice, jowari, bajri, moong, til, kurring, hemp, nangli, ooreed, chana, Indian corn, sugar-cane, tobacco, indigo, turmeric and esculent vegetables. Those of the rabi, are wheat, barley, matar, gram, 'ouree' or mustard, surshiff, jambha, dhunya, jowari, jeera, and mohur. The poppy was formerly extensively cultivated in the Purgunnahs of Bubak and Samtanee and opium of a superior quality was produced, but since the conquest, the cultivation of the poppy has been prohibited. In lake Munchar the lotus is produced in great abundance, the seeds, root and stalk of which supply the thousands of the poorer classes of inhabitants with food.

The variations of climate are much greater in Sehwistan than in the other two districts. The hot season commences about the end of April, and usually continues till the end of October. During this period the average range of the thermometer in the shade at noon is from 98° to 110°. The nights are sultry, and there is little perceptible difference between the temperature of day and night, while mosquittoes and sand-flies abound. During the cold season the thermometer falls to near freezing point in the course of the night, and rises again during the day to summer heat. These sudden changes and the long continued heat are very trying to the European constitution, but the natives of the country are healthy and long lived.

The estimated length of Sehwistan is about 40, and the breadth about 50 miles the amount of square miles is about 2,000.

The amount of male inhabitants is estimated at 39,639 which multiplied by four for the families, gives a total of 158,556.

The population as in other districts is of a mixed character, but besides the three great classes of agriculturists, traders and fishermen, there is a fourth class which possesses great influence in this district, *viz.*, the resident Jagirdars—large tracts of land have been granted in Jagir in the other districts but the owners of them are for the most part non-residents whereas in Sehwistan, the majority of the Jagirdars reside on their estates. The Zamindars too are a far more numerous and more influential body than in the other districts. They are generally Sayeds or wealthy Hindus. The former are a remarkably fine race of men and most of them cultivate on a very extensive scale. The requisite number of artificers is found in most of the large villages and in the towns of Bubak and Arazee, carpets of a superior quality are manufactured.

The average annual revenue derived from my Collectorate since the country came into our possession was for the official

year—

	Rs.	a	p.
1843-44	2,28,211	7	5
1844-45	6,45,119	6	6
1845-46	5,85,921	5	11
1846-47	6,25,781	12	4

The revenue is derived from the following sources :—

Land revenue	Miscellaneous.
Customs and taxes.	Fees and fines.
Town duties.	House and market rent.
Garden rent.	Confiscated property.
Liquor and Drug contracts.	Unclaimed property.
Fishery and ferry contracts.	Profit and loss.
Goldsmiths (Orsidue) and Weavers, do.	Taxes.

Query No. II.—Is the population divided into separate village Communities each having its hereditary establishment for the management of its affairs, and if so, what do these establishments consist of and how are they remunerated? Are lands divided into separate fields and surveyed, their boundaries defined, what are the tenures on which they are held?

Captain Rathborne, Collector of Hyderabad.

2. The population is divided into separate village communities but on a wholly different plan from the village community system in India. Here the Musalmans of a village usually belong to the same tribe who are guided in minor points by their Rais or Patel and the Hindus by the Mukhi and Panchayat, but they have nothing to do with the revenue or management of public affairs and receive no remuneration

except perhaps in gratuitous services occasionally by the villagers. They have however some influence from their position and are generally spokesmen when the villagers have any complaint to make or favour to ask from Government.

The lands are not permanently divided into separate fields, nor are the boundaries defined—though there are certain boundaries recognized as the boundaries of the village lands—at the cultivating season however each cultivates his wheel or piece of land separately and each water-course from a large canal has usually its separate owner singly if a rich man, or in partnership if the ownership be in the villagers—the boundary to the land in such cases is the limit up to which the water from the water-course can be made to water.

The tenures by which the Rayots in Sind hold their land is this, that as long as they cultivate the land and pay their rent, it is held oppression to dispossess them:—if they cease to cultivate it and pay rent, it may be given to any other who will take it—and thenceforth the original holder has no further claim.

Major Goldney, Collector of Shikarpur.

2. Villages have not separate communities with hereditary establishments. The spring crop has its field divided pretty generally—for the autumn crop owing to the quantity of land unoccupied, the fields are not so well defined. The lands appear to be held on hereditary tenure. The limits of villages though often disputed seem to be immutable; the land is held on the condition of paying rent for such as is cultivated only. I presume that the explanation of rent free or Jagir tenures is not required under this head. The zamindar claims an exclusive right to cultivate certain lands: and the peasantry he employs whensoever he can procure them. In cases where he is obliged, from inability to till them himself, to make over land to another zamindar, he usually demands lapa or quit rent, varying from one to four annas, if cash, or if in kind, from 1/20 to 4/20 of a kurwar per bigah 15 to 16 lbs. according to the quality of the soil, description of crops, &c.

Captain Preedy, Collector of Karachi.

2. The population is divided into separate village communities but these have no hereditary establishment as in India, to manage their affairs. Each caste or tribe has its Mukhi or Headman to whose decision all trifling matters of dispute are referred, but he receives no remuneration for his services. The lands are not usually divided into separate fields, but the boundaries of each village are defined by particular trees, stones, bunds or nullahs, all of which are well known to the Kotars or Kotwals, several of whom are located in each Purgunnah for the purpose of keeping traditionary records of the limits of all village lands, boundaries of Jagheers and of Zamindars' estates. The Kotars are referred to, when disputes arise regarding boundaries, they are considered as Government servants, and are paid in grain from the 4 cassas levied as 'Kurutch'. At the Battai or the division of the produce of each harvest they were formerly allowed to beg from the zamindars, and usually collected a sufficient supply of grain for their subsistence throughout the year. This practice has now been put a stop to, the number of Kotars varies according to the extent of the Purgunnah. In some Purgunnahs there are only three or four, in others from ten to twelve. Besides, recollecting the boundaries, they are expected to perform several other duties, *viz*, to move about the districts and to stimulate the cultivators to activity by pointing out waste land and threatening to report them if arrangements are not made for bringing the same under cultivation. They also seize and convey to the Kardar all stray cattle, and at the same time report any damage which the cattle may have done; they are also expected to report to the Kardar, any disturbances amongst the inhabitants and to point out the 'Dhul' or cash rent lands to the Government Zabits or measuring men—they are in fact 'Naibs' or assistants to the Kardars Their offices are usually considered as hereditary. In the event of a vacancy occurring through the dismissal of a Kotar for misconduct, the Kardars under instructions from the Collector appoint another Kotar in his stead.

In the Purgunnah of Sakra an 'Urbab' or chief was formerly elected from amongst themselves by the Zamindars.

His duties were to attend to all disputes between Zamindars or Ryots, and to endeavour to effect an amicable adjustment between contending parties. He was also expected to represent the agricultural community in transacting any business with the Government officers which affected their interests. For these services he was allowed a Toya of grain per Kurwar on the gross produce of the Purgunnah, and a rupee on each wheel. Soon after the conquest the Zamindars represented that their 'Urbab' was of no use to them, and begged that they might be relieved of the tax which he levied on them, and their request was accordingly complied with. I am however of opinion that Urbab in each district would be of much assistance to the Government officers.

The lands are held in Jagir, Zamindaree and in Ryotee, and the assessments on the two latter are fixed on the 'Battai' 'Kasghee' and 'Zubt' or 'Dhul' systems. The Government possesses an absolute allodial property in the soil, while the right of the Ryot to permanent occupancy is recognized, so long as he properly cultivates the land, and pays to Government the rent at which his land is assessed, whether it be a fixed share of the produce, or a fixed money rent. The Zamindaree system is most prevalent in my districts, but should either Zamindars or Ryots neglect to cultivate their lands, Government, as sole proprietor of the soil, can resume the neglected lands and make them over to more profitable tenants. This power seems absolutely necessary in a country like Sind, where the greater proportion of the revenues are derived from the soil. The rates of assessment formerly differed in every Purgunnah, but these have now in a greater measure been equalized throughout Sind by the new Revenue Regulations, published by order of His Excellency Sir Charles Napier, *vide* pages 97 to 112 of Civil Order Book.

Garden lands in the vicinity of Karachi and in the valleys of the Mulleer and Hub Rivers are assessed at one rupee per mensem on every 10 bighas. This is about as much land as can be cultivated with one wheel.

Query No. III.—By whom is the settlement of revenue made immediately with the cultivator and what chain of intermediate agency exists between the cultivator and the Collector?

Is the settlement for each cultivator's holding separately or for several jointly? Is it entirely in kind or partially in money? As regards the revenue in kind what proportion of the gross produce is taken from the cultivator? If the proportion varies, on what circumstances do the variations depend? Is the proportion taken from the cultivator chargeable in the first instance, with any expenses of management, any fees to village or district establishments, or any assignments to individuals or is the whole brought at once to the credit of Government? Is the cultivator ever allowed to redeem the Government share at a valuation or is it always disposed of on account of Government? In the latter case how and by whom is its assessment ascertained and under what arrangement is it kept until its disposal takes place? Is it sold by auction or by contracts, and in the latter case how is the price determined? Are the proceeds of the soil realized immediately or by instalments? If by instalments, of what usual duration and under what securities? Are defalcations frequent amongst the purchasers, and when they occur what steps are taken to secure the interest of Government? In the case of money assessments, on what principle is their rate fixed and what is their highest, lowest and average assessment? Are they based on a uniform land measure and what is its extent as compared with the acre? Is the revenue under such assessments punctually realized or if there are balances, what do they usually amount to at the close of the year?

Captain Rathborne, Collector of Hyderabad.

3. The revenue settlement is made in some parts immediately with the cultivator and in others with an intermediate party the Mukadim—where it is made with the Mukadim a fixed grain rent is usually taken annually, and the arrangement between the cultivator and Mukadim is left to be settled by themselves. When the arrangement is made direct with cultivator, the system is this. As soon as the crop begins to ripen a Battaidar is appointed, either the Kardar of the district or a separate person. He goes to the district and posts his Korawurs or watchmen over the different fields. When the grain is ripe, it is cut down, and then, still in charge of the watchmen, is trodden out by the bullocks. It is then carried off to the 'Khittah' or enclosure where it is placed in heaps, each

man's grain separate. The Battaidars with the Mohurur and the measurer then proceed to the spot—one of the cultivators divides each heap by guess into three or four equal portions as the rate of rent may be a third or a fourth The Battaidar selects one of these as the standard and it is measured, and according to that measurement, the 'Currutch' of 3 cassas a Kurwar for water tax and four cassas a Kurwar Purgunnah charges are taken from the other heaps belonging to the cultivator, and with the heap already selected form the Government share. A note is made of the amount and given to the cultivator, and that amount of grain is the rent which he has to convey as soon as practicable to lodge in the public grain store. It is there again measured and lodged in the store. The cultivator receives a receipt the amount is entered in the 'Kussera' or rent roll of the Purgunnah, the Ambardar and Battaidar affix their seals to this Kussera, it is countersigned by the Zamindars and is then transmitted to the Collector, a copy being sent to the Deputy Collector, and then the transation is complete.

In some parts where rice is grown instead of the battai being made of each cultivator's heap separately, the whole Kittah is battaied at once. The Government share is fixed and the people arrange about their own shares afterwards among themselves.

The settlement for grain crops is almost entirely in kind. There may be a dozen wheels in the Collectorate that under the new regulations pay cash. The settlement for tobacco, sugar-cane, indigo, cotton and vegetable crops is entirely in cash, and was so in the Meers' times.

The proportion taken from the cultivator is one-third or one-fourth with seven kassas a Kurwar charges for water expenses and Purgunnah establishments.

For the Khureef crops where the land is naturally flooded, the rate is one-third. Where the water is raised by wheel, the rate is one-fourth except in a few places where it is one-third. For rubee crops the rate is one-third except on lands watered by wells and double wheels where it is one-fourth.

The whole grain collected is at once brought to the credit of Government, but there is a charge for reaping and field watchmen—taken out daily as the crop is being reaped—of one-twentieth of the grain cut; and this is paid to the reapers or to the owner of the field if he reaps it himself and to the watchmen.

No proposition has ever been made to me by cultivators to redeem the crop at a money valuation; but occasionally the grain has been proposed and allowed to be danbundied, that is, instead of waiting till the Battai—estimating the amount of grain in the field of standing corn and fixing the assessment accordingly. This system is followed in the desert and other parts where the fields are so scattered or the crops so scanty as to render the perpetual watching them by the Korawurs impossible or nearly so.

The grain is stored in 'Ambarkhanas' till sold. Tenders are received by the Collector through the Kardars, or Deputy Collectors or direct from the grain dealers and accepted if the rates be thought advantageous—the Collector is in the position of a wholesale corn merchant and acts precisely as one of the trade would, looks to the amount of the crop, sees how the out-turn has been in the states around, calculates how far the supply will tally with the demand, sees therefore what prices are likely to rule eventually and arranges his sales accordingly. Latterly however I have sold a good deal of grain by putting it up to public competition.

The proceeds of the sale are occasionaly realized at once; but generally in three instalments, except at auctions where more than one month's credit is not given. The duration was in this Collectorate always one month between each 'kist' but the Collector of Karachi last year, allowed eight months' credit and I was obliged to give in after a long struggle and fix the instalments at two months between each kist instead of one. Unless however some steps be taken this will eventually prove fatal to the interests of Government and the public; as it must tend to encourage gambling in grain among men who have little or no capital. I believe however that this very long credit

system has been already abandoned. No security is taken from buyers except the usual one among merchants, of not selling to any but those whose credit is good. Sometime a second or third name is however required to the bills given in payment.

Defalcations on the part of purchasers are very rare indeed. When they occur the same steps are taken to secure the interest of Government as are used by one merchant towards another. If the defalcation appears of a fraudulent character, the man is imprisoned. If otherwise time is given, and every opportunity allowed for a man's retrieving his affairs. The whole amount of bad debts since the conquest on this account does not exceed six thousand rupees.

Money rents are fixed at one standard throughout this Collectorate of Rs. 1-6-0 per bighah of 25,000 square yards (or rather more than 1/2 an acre) in addition to a collecting fee of 6 per cent.

Balances on this account used at one time to be allowed to stand over occasionally till the next year but are not now; as the Kardars have been particularly enjoined to take the money in all doubtfull cases before the crop is cleared off the ground.

Major Goldney, Collector of Shikarpur.

3. There is no intermediate agency between the Collector and the cultivator, for the settlement or assessment which has been arranged with the zamindars of each district; or where desired, with those of each village, but as the existance of different leases (in kind and in cash) on the same village would open a door to much peculation by the farmer representing to the land Surveyor, that certain fields were not to be measured for cash rents but bataied in kind, and to the assessor (Battaidar) that the same were to be measured not bataied and thus evade payment altogether; I have left it to the several farmers of each village to agree among themselves, whether to apply for cash rents or leases in kind.

Each lease is wholly for cash or wholly for corn rent therefore of the whole village. Suppose the gross produce of

an estate to be 320 Kurwars, then Government receives 1/3 and the farmer 2/3 of that quantity, first deducting the odd 20 as "Fees" which are rated 1-15th of a Kurwar on each Kurwar of a gross produce. In the case above supposed, Government receives as rent 100 Kurwars and again as fees 20

Total ... 120 Kurwars.

The farmer receives 200 Kurwars clear. From the 20 Kurwars fees, the entire expense of dividing the crop is defrayed. Also of a functionary called the village "Kotwal" whose duty it is to acquaint himself with the minutiæ of the entire cultivation of his circle: Any balance after these expenses are defrayed, goes to Government for the general expenses of the district at large, as Kardar and establishment. The farmer is only charged with paying half of the wages of the field watchmen required to watch the ripening crops and to prevent their being cut, or (which is more common) to prevent the ears of Jowaree being abstracted by the farmers.

The Government portion of the produce is fixed, as a maximum; where waste land is reclaimed or canals dug at increased labour and expense, it is reduced to one fourth or less at discretion of the Collector. Kushmore being very disturbed and almost deserted when we got it in 1845 I gave a lease at 1/5 to encourage settlers from Bhawalpure and Mooltan for 3 years. The Government share is, in the neighbourhood of Shikarpur only subject to a deduction of 1/8th to 1/4th as Puttadaree, a species of free holding peculiar to this district introduced by the Pathans It seems to partake both of the Jagheer tenure and of the right by purchase

Where the cultivator does not contribute labour to the canals he is liable to pay water rates 3, 4, 6 to 8 annas per Bighah, as agreed upon by the capitalist who undertakes to clear the canal.

In a new canal dug in Naushera under my auspices in 1845-46 of above 22 miles in length, the proprietors levy 8 annas per Bighah, the district being bound to furnish labour on the grand canal which feeds it.

Where zamindaree is established the cultivator pays it (*vide* querry 2nd) there is no other cess.

The whole Government share where there is no Pattedaree is stored for Government in granaries until disposed of.

If the cultivator desires to commute his corn rent for cash in any particular harvest it is done by a special agreement based upon the cash rent as laid down by His Excellency's Revenue Regulations of March 1846—1/8th for autumn and 2/8ths for spring crops per acre; but modified by the Collector according to the state of the crop, the price of grain, and other circumstances. In no case do I accept of less than the regulated rent usually, the farmer proffers more.

It frequently occurs that Hindu capitalists offer to pay cash rents for a given tract under crop: but these are invariably declined unless the farmers assent, or be partners in the transaction. In 1845, I sold rice crops on the ground, the Government share, at Rs. 4-4-0 per Bighah. This was prior to the new regulations, and while the Meers system was still in force. Cash rents are realized by instalments: No securities are taken from farmers, the land being considered as sufficient guarantee. Four or five monthly instalments are usual. The first instalment for my account now cutting has been paid in this neighbourhood? The accounts of other districts are not come in, but collections on account are going on generally.

Except in Mehar and especially in Baghban, I have not many arrears of rent The latter district I find extremely corrupt and evasive and were it possible I should like to farm it out to a severe contractor for a couple of years. It has been a scene of peculation, and evasion ever since the conquest, and lying remote from European superintendence till 1846, has got into bad habits.

Defalcations among the purchasers are not common. Security being usually taken where parties are not known to be substantial men; when such occur imprisonment or placing the seal of Government on the chattles of the defaulter is the

only remedy. Purchases are by tender or by auction, at discretion. If I know the market is unsteady, I will accept a tender perhaps in preference to the delay of an auction. Three instalments are the usual number.

The land measure for cash rents is the Bighah of 2,500 square yards—the english acre being 4,840 square yards, the rent being invariably Rs. 1-8-0 and Rs. 2-8-0 per bighah for autumn and spring crops. My arrears on the 1st September, October's accounts not being received from the Deputies, amounted to Company's Rs. 50,356-1-0 of which a portion has unquestionably been realized during October; but the amount I cannot precisely state. These are the arrears outstanding from the dates of conquest to the present time.

Captain Preedy, Collector of Karachi.

3. The settlement of the revenue is made by the Collector and his Deputies through the Kardar, Buttaidar and Zabit of each Purgunnah. These servants form the immediate chain of agency between the cultivator and the European officers. The settlement for each cultivator's holding is made separately. If on the Battai or Kasgee system, it is entirely in kind and is received by the Battaidar and Kardar; if it be Dhul or cash rent in money and it is received by the Kardar on the report of the zabit. When the revenue is levied in kind one-third or one-fourth of the gross produce is taken from the cultivator on lands which formerly paid half, one-third on those which are irrigated by means of wells and which are dependent on rain, one-fourth together with fees amounting to 7 cassas per Kurwah on the gross produce on account of 'Currutch' and Hakabo or water tax. The variation in favour of the wheel cultivation is made on account of the additional expenses incurred by the cultivator in raising the water. The proportion of grain taken from cultivator is chargeable with some expenses of management. The Buttaidar and his Moonshi, the Purgunnah Moonshis, the Kotars, Kurawas or grain watchers "Dulwae" or measuring man are all paid in grain out of the Currutch or four cassas per Kurwah levied on the gross produce. Toyagee or a Toya of grain per Kurwah on the Government share is also allowed to the Kardar. The cultivator can, if he wishes it, always

redeem the Government share at a valuation on making an application to that effect to the Collector.

On the Buttai or division of the grain being completed, the Government share either delivered atonce to merchants who have bought it of the Collector, or, it is made over to the care of an ambardar or grain store-keeper, who takes charge of it and stores it until purchasers are forthcoming.

The grain is sometimes sold by auction sometimes by contract the 'Neeruck,' or price current of the zillah at the time of sale determining the price in the latter case. If sold by auction, the proceeds are realized immediately. If by contract, generally by instalments. These instalments formerly varied from two, three, four, six, to eight months duration, but I have lately reduced the period to three months, the first kist or instalment being paid in ready money on the delivery of the grain, the other two within the subsequent 3 months. Securities have not hitherto been given but it has become necessary to exact the same, as defalcations are becoming frequent among the purchasers, which was not the case during former years. When they occur the defaulters are arrested and if they have sold the grain they had purchased concealed or made away with the proceeds they have realized by its sale, they are treated as fraudulent debtors, and punished by the confiscation of their property and by imprisonment with hard labour. In no instance however has it hitherto been necessary to resort to these extreme measures in my Collectorate. In the case of money assessment the rate is fixed in Upper Sind at Rs. 2-8-0 per Bigha and in lower Sind at Rs. 1-8-0 per Bigha, with a fee at the rate of 6 per cent. on the amount of collections. A discretionery power is vested in Collector to increase their assessments on such lands in the vicinity of towns where there is a good market. I have not however deemed it advisable as yet to make any increase on these rates in my districts. The assessments are based on one uniform land measure, *viz.*, on the Napier Bigha of 2,500 square yards. The revenue under the above assessments is punctually realized and there are usually no balances on this account at the end of the year.

Query No. 4.—What is the proportion of alienated to Government lands and under what terms are the alienations held—; are they hereditary or for life, if both what is their proportion to each other? How far have claims to alienations been investigated and settled? Do the holders of alienated lands settle with their sub-tenants on the same principles as the Government Officers with the cultivators of Government land? Are there any appropriations of land to religious institutions or as charity to individuals?

Captain Rathborne, Collector of Hyderabad.

4. The alienated lands in this Collectorate amount to about 3,500,000 beeghas. They are all strictly speaking grants during pleasure and the greater portion of them were really given and resumed and changed by the Ameers at will—but the possessions of the great chiefs were confirmed to them by oath on the Koran, and were generally treated as hereditary and not resumed unless in very special cases. The proportion of such grants of a more permanent description in this Collectorate is about half of the whole of the land alienated or about 17 and 18 lacs of beeghas.

Where the alienated lands are Jagheers in which a share has lapsed to Government the tenants are settled with by the Government Buttaidar and Kardar precisely in the same way as the tenants of the ordinary ryotee lands. But in respect to those Jagheers of which the Government holds no share, the tenants are settled with monthly at the rates and according to the plan prevailing in the Meers' times: the Jagheerdar not being justified in exacting what rates he pleases; he is not the owner of the land but only the representative of Government in its revenue rights as regards the land in question and can only levy at the Government rates the Government share.

There are no appropriations of land to religious institutions though some Peers and Fakirs, and Gurus and Syeds hold grants for gardens and small patches of vegetable ground—mostly for a well and five or six beeghas and in no instance that I remember for more than a hundred beeghas. The

total amount so held is very small. These are the only charitable grants in this Collectorate.

Major Goldney, Collector of Shikarpur

4. Alienated lands consist of Jagheers to the estimated amount of 254,748 Indian acres. They are hereditary under certain restrictions as follows :—

1st.—First class Jagheers held for 20 years prior to the conquest continuously or on a patent not resumable at pleasure and not being in lieu of civil or military pay may be converted into perpetuities on surrendering all waste included in the grant optional with grantees; but if not so converted during the life of present incumbents, all waste will at his death be resumed and 3/4ths of the proceeds of the estate only be confirmed to his heirs.

2nd.—Second class held during less than 20 years not being civil or military pay, may become perpetuities on resigning all waste and a payment of a quit-rent of Rs. 2 per beegha on death of present incumbent.

3rd.—All other Jagheers or portions of those held in lieu of pay revert to the estate at the death of the present incumbents.

4th.—Regrants will in future include none but lands under cultivation, and then too, subject to the quit-rent of Rs. 2 per beegha. All hereditary estates of the four principal branches of the Talpur family to be considered as in the first class. Jagheerdar absolved from military service in their tenure; if their personal services be required they will receive pay.

Jagheerdars to pay proportionate share of expenses of clearing the canals that water their lands.

Jagheerdars omitting to report the death of sharers in their Jagheers, shall be liable to forfeiture.

Jagheerdars fraudulently enclosing Government lands in their Jagheers shall forfeit double the amount of land on proof of such fraud.

The titles have been investigated to the best of our opportunities but probably some frauds and forgeries of deeds will yet be brought to light. It seems likely that at one time or another the greater part of the lands in Sind have been temporarily granted to individuals for services civil or military and subsequently resumed as freely as they were given. If this assumption be at all correct it follows that many dormant sunnuds may have been produced as titles to land for which services long obsolete were exacted or which had been long forfeited by the caprice of the grantor or rebellion of the grantee.

In proof of my theory I must advance the fact of Meer Ali Murad having resumed all the Jagheers of Meerpur and Ubaura, when ceded to him by us in 1845 and also of his having written to me not to transmit any more confirmatory orders by H. E. to grantees in Ghotkee because he expected it shortly to be made over to him in exchange for Boordeka when he was resolved to resume them all likewise.

He has since resumed all or almost all the Jagheers in his own territories: whence I infer Jagheer titles are not so irrefragable as the grantees in our districts.

All holders of alienated lands are at liberty to make what arrangements they please with their tenants as regards rents. Poll tax, transit duties, fees for compounding of felonies are abolished: these each Jagheerdar formerly levied in his own Jagheer to a considerable amount. Many Syeds hold grants and a few mendicants, Hindus and Musalmans, enjoying rent-free gardens and plots of ground always very small. The majority of grants were for military service.

Captain Preedy, Collector of Karachi.

4. The proportion of alienated to Government lands, is about one-tenth. These lands were originally assigned in Jagheer, either for the pay of troops or as civil salaries. They are resumable at the pleasure of Government. The

Jagheerdars are entitled to levy the Government share of its produce but they cannot dispossess any tenant of his lands without orders from Government. They have the power of reducing the rates of assessment and in granting waste lands are at liberty to make their own arrangements as regards the rate and mode of assessment. They pay water tax to Government on all lands watered from the Government canals at the following rates, *viz.* :—

On each churkha or wheel worked by two bullocks or a camel 3½ rupees per wheel, on each hoorla or wheel worked by one bullock Rs. 2.

On selabee or flood land 3 cassas of grain per kurwah on gross produce or if they prefer paying in cash, at the rate of one rupee per kurwah on shalee or rice in the husk, and Rs. 2 per kurwah on all other grains.

Jagheers are held for life only. The titles to their alienation have been generally investigated and settled; there are a few appropriations of land to Syeds and religious mendicants but none of these exceeds 20 beegahs in extent.

Query No. 5.—What proportion of the Collectorate is cultivated and what revenue is derived? Is any revenue derived from the waste land? Is any encouragement held to bring waste lands into cultivation and of what nature?

Captain Rathborne, Collector of Hyderabad.

5. I should calculate that about 575,000 beeghas ryotee land are cultivated in this Collectorate besies fallows and Shikargahs and perhaps two-third as much more, Jagheer land. The remainder amounting to, in round numbers, three hundred and fifty four hundred thousand beegahs, is waste. Of this one-half is desert and probably a third or half of the remainder not cultivable with any ordinary means likely to be ever at our disposal.

No revenue is derivable from waste lands unless the fees taken for cattle grazing in the Shikargahs be so considered. As an encouragement to bring them under cultivation, the

tenant is allowed to hold them two years rent-free; but in nearly all cases the great burthen of improvement in this Collectorate must rest on Government; the chief outlay being for canals which Government only can make; all that is wanted generally to bring land into cultivation is water and this the Government alone can, in the existing state of things, support the expense of bringing.

Major Goldney, Collector of Shikarpur.

5. I estimate that 410,000 beegahs were under crop last year. Twice that amount was cleared but lying fallow. Autumn crop land is seldom cropped more than once in three years.

A fee called "Gao churee" is levied from parties grazing their cattle in waste lands: no other revenue is derived from waste.

Reduction of rent or wholly rent-free leases for one, two or three years constitute the encouragement given to reclaiming of waste, sinking of wells, &c., and in all such cases we stipulate that the land reclaimed shall be in excess of former cultivation.

Captain Freedy, Collector of Karachi.

5. I estimate the cultivable land in my districts not including the extensive valleys situated amongst the hills and which are dependent on rain for fresh water, at 812,000 of which in 1846 about 190,000 or about $\frac{1}{4}$ was under cultivation. No revenue is derived from the waste lands. Advances of money to the value of a pair of bullocks and seed are made to those who will undertake to cultivate waste lands and they are also allowed to hold their lands for the two first years free of rent.

Query No. 6.—Are loans given to cultivators and under what rules? Are they punctually repaid? Do the cultivators ever resort to money-lenders: and if so, on what terms can they obtain money? Are remissions of revenue ever granted and under what circumstances? Are failures of the payment of revenue by one cultivator made good by an extra assessment on the others?

6. A system of loans was sanctioned for cultivators but none have been yet granted. In some few cases grain has been advanced which has been recovered at the Buttai. The cultivators are for the most part entirely in the hands of the money-lenders. The terms the money-lenders make are about forty per cent.—everything included; but as in India the debts are chiefly nominal, for from generation to generation, the cultivators are in the hands of the Bunyas or of their Mukadims; are supported till harvest time; and then the crop is taken on the money-lenders' own terms, and a portion re-issued to the cultivator in the shape of subsistence, at almost any rate they choose to charge. The great object of the Mukadum or Bunya is to get the cultivator involved beyond hope of extrication and thus secure his services for ever on his own terms. This system has however greatly broken down since the conquest. No remissions are granted. Where cash rents are paid the tenant takes the chance whether the season be good or bad, on grain rents, the lessened amount paid in a bad season to Government acts as a kind of proportionate remission. There is only one exception and that is when from any cause there is no crop at all in a field then it is ploughed up and passed over altogether by the Revenue Officer.

Captain Rathborne, Collector of Hyderabad.

There is, and can be, under the system, no failure to pay on the part of the cultivator, unless to a very trifling extent indeed; and each cultivator is only responsible for the rent of his own lands except in case of the public grain being plundered in the fields when the whole village community is responsible, and is bound to make good the loss to Government with such additional fine as may be laid on it.

6. Loans to the small farmers to the amount of a pair of oxen, a wheel, say 20 to 40 rupees, are authorized and occasionally applied for and punctually repaid. It has been usual to give advances on a larger scale to farmers for digging canals; cash and grain are both given and usually repaid at the stipulated period. Interest at 6 to 12 per cent. according to agreement is levied on these loans.

Major Goldney, Collector of Shikarpur.

The farmers as a body are in the hands of money-lenders, whose terms of interest are very exorbitant from 12 to 40 per cent. A common mode is to exact half the produce of the farm on which the loan is expended as interest and to pay the Government rent: the tenant being liable to repay the capital sum advanced out of the other half.

Remissions of rent are not made but when cotton or other lands (but chiefly cotton because most liable to such accidents) are injured by inundation, being on cash rent the tenant has a clause inserted in his cash rent lease, covenanting that in event of injury by inundation only on his immediately applying at the time to have his rent of such inundated ground taken in kind, instead of in cash, the Government will allow it to be levied in kind at 1/3 Buttai.

No cultivator is chargeable with defalcations of another.

Captain Preedy, Collector of Karachi.

6. Small loans are frequently granted to the poorer classes of cultivators. These by the new Revenue Regulations are limited in amount to the value of a pair of bullocks; they are usually punctually repaid, but there are exceptions to this rule. The cultivators generally, both zamindars and Ryots resort to money-lenders, to whom they pay a minus rate of interest, 24 per cent. per annum being the usual charge. Remissions of revenue at present are granted only when the crops have entirely failed. In the Purgunnah of Canote and Bhera in the Jurruck district, land was formerly assessed at one kurwah of grain with fees, for each churka or water-wheel and in the event of any cultivator being unable to pay the Government share of the produce owing to a failure of crops, the deficiency was made up by the other cultivators of those Purgunnahs. This custom has been abolished by order of His Excellency the Governor, but the Government share of the produce is still levied in these two Purgunnahs on the wheel, instead of on the beegha or by the battai, as in the other districts.

Query No. 7.—What proportion of the cultivated land is irrigated? What is the system of irrigation, by what rules is it

regulated and how is it assessed? What is the present state of the means of irrigation as compared with what they appear to have been at former periods, and what measures are required for their improvement? What regulations exist for the appropriation of the water? Do disputes ever arise respecting it and how are they settled? Is the expense of constructing and repairing works of irrigation charged to the alienated lands, when the holders partiticipate in the benefit?

Captain Rathborne, Collector of Hyderabad.

7. The whole of the cultivated land is irrigated either naturally by the overflow of the river or by canals or wells except the desert and its borders on which however there is no crop hardly, except in years when rain is abundant. There is very little of this Collectorate overflowed by the river except through the medium of canals.

I am unable to state how for the present means of irrigation may be better or worse than those which existed very long ago in Sind; but I should think they were as good as they ever were, and that any fault that exists must be rather attributable to changes in the river itself than to any deficiency in canal arrangements. I believe however that these arrangements are now much more costly than they were—I think to make the canal arrangements as perfect as possible, that the channels should be deepened sufficiently to ensure a supply of water in the worst seasons—At present if the river is low, the water enters the canals too late, and leaves them too early to admit of a good crop. The money spent on the works is in such event to a great extent thrown away: the cultivators lose their labour and outlay, and become disheartened—and the result is consequently most injurious to all.

There are no rules regarding the appropriation of water further than established custom in relation to the supply of water to Ryotee lands—the chief points of which are that water shall not be given for new water courses unless the old ones are fully supplied—that water shall not be given to the cultivators of another Purgunnah—unless the lands for which the canal was especially dug have a sufficiency to spare, and that

the alienated lands shall not receive more water than they received at the time of the taking of the country and for which they had the authority of the Ameers.

Alienated lands pay generally water tax for the water they receive at the rate of Rs. 3-8-0 a large wheel, Rs. 2 a small wheel, and Rs. $1\frac{1}{4}$ a kurwar on rice and Rs. $2\frac{1}{2}$ on a kurwar on bajree and jowaree grown on flooded land. A fifth of the rent on cash paying lands, except gardens which pay 12 annas a beegha per annum. On alienated land however in which Government takes a share, the water tax is fixed as on Ryotee lands at 3 cassas a kurwar on the lands battaied and on the others at the above rates—also in some cases where the Jagheerdars paid half or quarter produce for water in the Meers' times—they pay the same now:—as that point was held in view by the Ameers' Government in fixing the amount of the grant made to them.

Major Goldney, Collector of Shikarpur.

7. All land is artificially irrigated in Sind for the autumn and middle crops. Either from wells, ponds, or canals by Persian wheels or by small cut from the large canals which convey the water spontaneously over the low lands—this last irrigation is preferred by poor farmers and where copious is preferable for the crops; but it is more precarious than that by wheels.

For the spring crop a good deal of wheat and barley, peas, grain and mustard are raised on land saturated by innundation of the Indus, and if a shower or two fall occasionally at Christmas or a little later, good crops are raised thus—but the best wheat and barley are watered by wheels on the Indus or on wells, and these crops never fail—about 1/3 of the wheat and barley is thus irrigated.

There is no difference in the assessment on irrigated lands and that on others a party digging a new or clearing an old canal by which others benefit receives water rates "Huggab" from such parties.

Our grand canals in Upper Sind are uniformly cleared by statute labour—the labourers being superintended and subsisted at the expense of Government—this is the ancient system, except that formerly the subsistence was nominal or issued for the first few days only, and after, when the labourers were collected and well settled down to their work, their grain rations were either discontinued by the Meer or embezzled by his officers.

From the grand canals, cuts are made leading into the land in every direction—many are of great magnitude Minor cuts from these branch off intersecting the whole face of the country.

Our canal department is on a scale far beyond anything that can be conceived to have existed under the old Governments—yet gigantic efforts were made, I am persuaded, at times, by the enterprize of individual Meers, their kardars and others. My four grand feeders are the Begari, Sindhu of Shikarpur, Ghar or Larkana river, and Nara running to Sehwan.

From the name and tradition of the Begari, also from its more direct channel, I consider it to be an artificial canal.

The Sindhu, Ghar and Nara have ample internal evidence of their being originally channels formed by the outbreaks of the Indus deepened, cleared, and extended by the inhabitants of their neighbourhood. The Noorwah at the tail of the Ghar is evidently an artificial continuation of that canal. Most of these great works appear to have been performed during the Kullora dynasty. Deferentially, I am of opinion that the greater part of the excavations annually required to remove the silt accumulated during the inundations may be safely and ecconomically left to the Revenue officers and that the efforts and expenditure of the canal departments be concentrated on works where science and money are required.

For instance the 'Nara', a branch of the Indus, never I suspect cleared of one cubic foot of sand by human efforts, is

becoming in places silted up: let the whole weight of Major Scott's establishment in Upper Sind be set to work: if on survey this canal be found in need, and susceptible of improvement and I will pledge myself to clear the three other canals, with the ordinary establishment of my districts. In fact I am inclined to consider that under ordinary circumstances and with ordinary diligence, the supply of water depends not on scientific conduct of the excavations, but on opening a good wide mouth to allow the river to flow in freely when at the requisite height and on the inundation itself being copious—as a proof for 1844-45, and 46, the canals were cleared by the Revenue Department and we had water this year, the utmost zeal was displayed by the Canal Department and we had comparatively none; the simple reason will be found in the water guages of the Indus, by which it will appear that its highest rise was far below the average of the 3 preceding years which no science can remedy.

Any improvement resulting from European Science and expenditure, will I think be more likely to do good if based, rather upon the principle of carrying to perfection the indigenous system under which these canals have been formed and which has worked indifferently well hitherto than upon the idea of superceding those altogether and bringing expensive attainments, superintendence and establishments to bear upon the mere digging out a large ditch.

Beyond preventing dams to the injury of farmers beyond these, no interference or rules are in force regarding water which is distributed as far as may be according to old established custom. Many disputes arise, decided by the Magistrate or most frequently by arbitration. Such disputes are best settled on the spot. The complainant who before the Magistrate or Kardar will persist in his claim, will often compromise the matter or withdraw it when in presence of the old men, who he is aware are well acquainted with the merits of the case for years past.

Jagheerdars, who do not contribute statute labour, pay a part of expenses of water works—or water rates—in proportion to their lands.

7. About 1/25th part of the cultivated land derives its supply of water from rain, the remainder is irrigated. The system of irrigation is as follows:—All the 'wahs' or large canals are dug and cleared at the expense of Government under the superintendence of the Canal Department, while the karias or small canals of less section than one cubic guz are dug and cleared by the cultivators. The canal guz formerly varried in each Purgunnah, but it has been equalized throughout my districts, the standard being now fixed at 3 feet 9 inches in length. The present means of irrigation are, I think, fully equal to those of any period within the last twenty years In the Sehwistan districts, some of the larger canals have become a good deal choked with mud, and these it would be desirable thoroughly to clear out The cultivators can draw off as much water as they required from the large canals. Those whose lands are contiguous usually club together and dig a 'karia' the water conveyed by which they share between them, each having the use of it in turn. Disputes however frequently arise regarding the water, most of which are either settled by the cultivators themselves or by the Kardar, few comparatively are brought before the European officers. The cultivators pay Hakkaba or water tax at the rate of 3 cassas of grain per kurwar on the gross produce of all land watered from the Government canals. The expense of constructing and repairing works of irrigation is not charged to the alienated lands, but the owners of the latter are charged with the Hakkaba or water tax at the rates specified in the replies afforded under paragraph 4.

Captain Preedy, Collector of Karachi.

Query No. 8.—What are the different qualities of soil in your district and what proportion do they bear to each other? What are the different sorts of production in the various soils and what is the estimated out-turn in a given quantity of land? What are the seasons for sowing and reaping—the ordinary modes and implements of cultivation and quality of agricultural stock possessed by a cultivator in average circumstances? Are there any superior sorts of produce fit for exportation such as cotton, indigo, sugar, oils, &c., and to what probable extent grown and of what quality? Whence do the cultivators supply themselves with clothing and

agricultural implements? What is their general condition as regards wealth or property?

Captain Rathborne, Collector of Hyderabad.

8. The cultivated soil in the Hyderabad Collectorate may be divided into three classes—recent alluvial deposit, covered annually by the river—an older formation of the same kind, reached only by artificial means of irrigation and to the south, vast swamps. On the former kind of soil the Rubee crops, such as wheat, barley, moong, mutter, jambha are grown. On the second kind, chiefly bajree and jowaree—on the third rice.

The average turn-out of the Government share may be taken at 4 cassas a beegha on bajree and jowaree, 5 cassas on wheat and barley, and 7 cassas a beegha on rice: that is clear, after deducting expenses of reaping, &c. Produce however here, as elsewhere, is very variable. Land that has long lain fallow, will, if of good quality, sometimes yield a return of a kurwar per beegha or more than 50 bushels an acre. An amount which would be reckoned enormous on even the highest cultivated land at home.

The time for sowing the Rubbee crops is in October and November, and the time for reaping it in April: the time for sowing the Khareef, is in June and July, and the beginning of August and for reaping it in the end of September, October and November. The harvest in the southern districts is always much in advance of that in the northern.

The modes of cultivation of course differ for the different kinds of cultivation, and on the different soils. On recent alluvial deposit, nothing more is required than to throw the seed into the mud and leave it till the crop is ripe. In rice grounds they sow seed first and thence to transplant within bunds as in India. The greatest of that kind of cultivation being to see that the rice is sufficiently flooded without being drowned and with the fluctuations constantly going on in the river's height during the inundation. This is often a matter of no small difficulty. Bajree and jowaree, after being sown

must be frequently watered by the Persian wheels unless the land lies sufficiently low to let the water from the canal overflow it at once. The implements of the cultivators are merely the common Eastern plough, the reaping hook, the poura and the Persian wheels—a cultivator in comfortable circumstances towards the north where wheel cultivation is followed would have about 40 beeghas under crop annually watered by two large wheels—he would have eight pair of bullocks, a tattoo, a cow and calf, a buffalo, and fifteen or twenty goats. To the south among the rice grounds, a man in that position, would cultivate from sixty to a hundred beeghas, would have a couple of bullocks, two or three cows, a couple of buffaloes, a tattoo, and four or five goats. Many of course have ten times this amount of stock, while others—thousands of them—have not stock at all, but are simple farm labourers. There is a little sugar, cotton and indigo grown but not sufficient even for home consumption. Very good surri oil is made, but not exported. The quality of the indigo and sugar is very good but they are spoiled owing to the coarse way they are made up. The cotton is very poor. The clothing of the cultivators is mostly made in Sind, the better classes wear English cotton clothes. The agricultural implements are invariably made by the village artisans. As regards comfort, I should say the people were considerably better off than the same class throughout the Deccan, and much worse off than in Gujrat.

Major Goldney, Collector of Shikarpur.

8. The soil does not vary much. It is chiefly a stiff rich alluvial clay—there is some sandy soil cultivated and with plenty of water, it is I think, more productive than the unmixed alluvion—in general the jowaree land will not yield a good crop above once in three years, or even seldomer. But I have seen spots which are cropped yearly. The spring crop land is of course cultivated every year, being either invigorated by the inundation of the Indus, or situated near a well. The water of the Indus, whether direct or flowing through canals, is far more nutritious than that from wells. The farmers say currently, that the one is gold the other silver; salt land gradually loses its saline properties when saturated with river water.

The quantity of land cleared or fit for tillage, if cleared, is estimated at 3,000,000 Indian acres—that desert sand, salt and barren composes the largest proportion and may be 3,300,000 acres. A great part of the desert soil is however good and is merely barren from want of water. Thus in former days the Noorwah near Khanghar is traceable into the desert half way to Minooty and there is a tomb called, 'the blacksmith's tomb,' 12 miles from Rojhan towards Bursleory where I am told was formerly fine grazing and the cultivation from that same canal and its branches. That there must have been water there, is evident, as neither could the tomb have been constructed nor its builders subsisted without water, of which there is now not a vestige.

Rice and indigo are grown in low lands—the latter requires well water to prevent the risk of inundation receding before it be ripe, samples of my rice have been pronounced excellent.

Cotton prefers low lands—a good deal is raised however on the high banks of the Indus, and other large canals, watered artificially by wheels—the low lands are subject to damage by inundation: Some "sea Island" seed was sown last spring, but the details of produce are not yet complete.

Jowaree is grown in the alluvial clays on higher lands, *i.e.*, on lands not liable to be flooded as it will not bear being over flowed.

Tobacco is grown pretty much as in Hindustan in patches near villages for the most part and manured and watered from wells. A good deal of wheat land has this year been sown with tobacco, the price of wheat being so low: about 1,000 maunds were sent down this year towards Hyderabad and Karachi from this vicinity.

The average produce per square beegha for grain may be taken at from $\frac{1}{4}$ to $\frac{1}{2}$ of a kurwar.

The kurwar weighing on an average all round 20 maunds or 1,600 lbs.

Cotton yields from 4 to 7 maunds uncleaned, selling at this moment at Rs. 3-8-0 per maund.

* Sugar 1 maunds of goor, indigo yields from 18 to 20 seers. Pease, gram, mustard seed, moong, siruka, are sown in lands left dry by the subsiding of the river—the produce is valuable, but less in quantity of the four first, averaging seldom more than 1/4th of a kurwar.

Rubee.—For the wheat, barley, &c. crop, the grain is sown in October and November and reaped in April.

Kharreef.—The jowaree and bajree and rice are sown in June and July, and reaped, the former in October and November and the latter a month earlier.

Peshrus.—There is a third crop, the middle crop, in Sind. The chief products are jowaree, chiefly for fodder and esculent vegetables as turnips, carrots, are classed in this crop.

The terms used for the different soils, the seed time and harvest, agricultural land revenue terms, and implements, assimilate very closely to those in use in Northern Hindoostan and the Bengal Presidency in general.

For wheat the cultivator ploughs his land, on the inundation subsiding, once it is then left for a month or so, again ploughed twice or thrice and sown. Wheat and barley lands are usually well cleaned from weeds and jungle.

For jowaree and bajree, the land is saturated with water, then ploughed and sown: the jungle is cut down, but often not eradicated—hence the neglected appearance of the land, which often appears as if thrown out of cultivation, and abandoned to jungle, whereas it is merely fallow.

* For further particulars if desired, in detail, specially for sugar, *vide* report in Secretary's office No. 780 of 27th May 1847.

Pease, mustard, gram, siruka, are usually sown by scattering the seed into the cracks formed on the drying up of the inundated land, ploughing is not deep—the clays would bear deeper ploughing in general: a good crop can be obtained at a depth of six to nine inches.

A cultivator or a family of them in ordinary circumstances would possess four or five pairs of oxen. For a jowaree land on a low level, one pair will suffice for 12 to 15 acres. Where the water is to be raised by wheels, one pair will not manage more than 8 on canals or 4 on wells. A well cannot be advantageously worked without two pairs in constant use, working 6 hours each pair. The camel is not used on wheels in Upper Sind generally.

Indigo is grown but scarcely sufficient for exportation: sugar is grown too but for little more than home consumption. Some cotton is exported, but most of it is worked up into piece-goods, of which 23,262 pieces were exported last quarter.

Opium was grown for export chiefly, the cultivation is now prohibited.

Agricultural implements are invariably made at home by hired workmen assisted by the cultivator—rude as it is, the wheel requires some percision in the arrangement of the teeth. Clothes are purchased. Some cotton thread is spun by the families of the poorer agriculturists, but the cloth is manufactured by the weavers.

The husbandmen in general are poor, comfortable—food and fuel being cheap—and they are well clad.

The zamindars of a superior grade all keep their mares and appear well off—they have not much ready money, but living in a homely way upon the produce of their farms, are not in want of cash after they pay their rents.

Captain Preedy, Collector of Karachi.

8. The cultivable soil of my districts may be divided into three classes, varying considerably in value. The first sort is a light coloured, firm and exceedingly rich soil, the second somewhat darker, containing greater proportion of clay or sand, and the third of a still darker hue, containing large proportions of clay and Nitre. As no revenue survey of the districts has ever been made, I am unable to state what proportion these soils bear to each other. Wheat barley, jowaree, bajree, sugar-cane, indigo are sown in the first sort of soil while rice, mung, &c., are sown on the two inferior classes—a Napier bigha of the first class soil will sometimes produce half a Kurwar, about 950 lbs. of wheat or jowaree, and a similiar out-turn of rice in the husk is sometimes derived from the second class soil. The season of sowing the rubbee crops is during the month of October, November and December and of reaping during April and May. The season of sowing the khareef crops is during May, June and July and of reaping during the months of October and November. The ordinary mode of cultivation or silabee or flood lands is to plough up the land as soon as the inundation subsides and immediately to cast in the seeds of the rubbee or spring crops, which in most cases require no other supply of moisture to bring them to perfection, than that derived from the saturated soil. In other situations, where the water requires to be raised to irrigate the lands, the Persian wheel is used which is worked either by one or two bullocks or by a camel, according to circumstances. Where the land is very high, as is frequently the case, on the banks of the river, two wheels are necessary, one below and the other above. Rice is usually cultivated in low lands which admit of being thoroughly flooded; these are divided into large compartments in which the water is retained, by means of embankments dug out of the numerous trenches which convey the water from one part to another. The rice seed is sown on silabee land during the months of April and May and when about half a foot in height, it is transplanted into the flooded compartments above described. The lands on which bajree and jowaree are sown, are also divided into compartments of a smaller size into which the water raised by means of the Persian wheels is successfully turned. The agricultural

implements are of the rudest description imaginable—the plough is a little more than a crooked stick with a small piece of iron, which answers for the share attached to it. It is worked by two bullocks and owing to the lightness of the soil, performs the work required of it, better than could otherwise be expected. A rude kind of drill plough called "Naree" is used in sowing wheat. It consists of a hollow bamboo with a funnel for the seed on the top, and a small plough share below. It is worked by two bullocks and as it ploughs up, or rather scratches the earth the seed dribbles through the bamboo, while the cultivator replenishes the funnel with grain from a bag which is slung over his shoulder. The whole affair is most primitive. The pawra or hoe is the implement in the use of which the Sindians are most skilful. With this they excavate canals, throw up bunds, level their fields, &c., and it is astonishing how much soil an able bodied man will remove with this rude tool in the course of a day. A cultivator in average circumstances possesses six or eight bullocks, and two or three ploughs. Some of the principal zamindars are very rich in agricultural stock. One of them Jan Muhammad Kulmuttee, principal zamindar of Ghorabaree stated to me that he possessed 200 ploughs, 400 bullocks, 80 cows, 100 buffaloes, 200 or 300 sheep and about 50 camels. The superior sorts of produce are sugar-cane, cotton, indigo, and oil seeds. The juice of the former is manufactured into "Goor" all of which is consumed in the country. The art of making sugar from the cane is unknown in Sind. The whole of the cotton and oil produced in my Collectorate is consumed in the country. It may amount to about 1,500 maunds of the former, and to about 6,500 maunds of the latter. About 80 maunds of indigo are annually produced in the Mahajanda and Canote districts, the greater part of which is exported to Muscat. The quality is good, but owing to the careless mode of preparing it, it is by no means equal to that of Bengal. The poor cultivators are for the most part supplied with clothing manufactured in their own villages. Their women clean the cotton and spin it into yarn, which when prepared in sufficient quantities is made over to the weaver and woven into a coarse kind or dangaree a "Than" or piece of which, 24 cubits in length and one "hath" in breadth is procurable for one rupee. The agricultural implements are all

manufactured by the village smiths, and carpenters. The cultivators generally, not excepting the principal zamindars, are overwhelmed with debt, and the majority of them live from hand to mouth. Labourers are however few, and as they are paid in grain, and one harvest so rapidly succeeds another, no one who has the will and health to labour, need ever suffer from actual want. On zamindari lands the zamindars for their own advantage usually take care to supply their "Harees" or sub-tenants with food, &c., throughout the year. Were they not to do this, the latter would leave them and go to others who would be but too willing to employ them.

Query No. 9. Do the cultivators possess a permanent, hereditary and transferable interest in the land they cultivate, and if so, of what nature and subject to what limitations? Do they dispose of it by sale and mortgage? Do they ever let it to sub-tenants? Where the tenure is of less permanent character, is it yet of some stability and duration as under leases for longer or shorter periods, and if so, subject to what limitations and securities? If the land is transferable, is any Register kept of the transfers whether by sale or mortgage? Does the neglect to cultivate forfeit a holder's right of occupancy? Is any compulsion used to maintain the extent of cultivation or are the cultivators allowed to relinquish land at pleasure?

Captain Rathborne, Collector of Hyderabad.

9. The cultivators possess a permanent hereditary and transferable interest in the land they cultivate to this extent, that as long as they or their representatives, or lessees, choose to continue the cultivation, or pay rent the land is theirs; but on its ceasing to be cultivated and pay rent, the State disposes of it as it pleases. Lands highly improved, such as sugar-cane or indigo lands are disposed of by sale or mortgage, or are sublet sometimes, but not often other lands—the sale or mortgage in such cases, is simply the sale or mortgage of the implements.

In the Meers times, leases were given to persons taking new lands, granting a certain remission on the rent taken, but owing to the general reduction on rent under the British, these leases have become mostly nugatory, as the holders are only

on the same footing as the rest of the world. Government now grants leases to the cultivators of waste land, but they are given in a security to Government, that after enjoying two years of free tennure, the tenant shall not throw up the land, rather than anything else. Public gardens are also let on lease for seven years, whenever, a tenant at fair rates could be found.

The Register of the transfer of lands is simply the Purgunnah Kusra, or rent roll—no other Register is kept, except as regards rent free and alienated land, which are all accurately registered.

The neglect to cultivate forfeits, as above stated, the right to occupancy—no compulsion is used to maintain the extent of cultivation, and the cultivators can relinquish the land at pleasure, except where under the new rules they have, on the faith of a permanent occupancy, enjoyed land two years rent free, in which case they can escape only by paying up the arrears.

Major Goldney, Collector of Shikarpur.

The land tenure is hereditary and transferable: at least in practice it may be characterized as "Hereditary" while kept in cultivation. The land-holder sublets his lands to cultivators reserving a *Quit rent on the right of "† Butaying" the crop as the parties arrange together.

He can resume these lands at any time after the season is over, if the cultivator neglects to till them—or he may bring in strange cultivators from a distance: land is both sold and mortgaged.

In the Meers' time, the land-holders were liable to expulsion for neglect of tillage: but from the sub-division of the country under different Ameers, expulsion was seldom resorted to first because culprit was received with open arms by the nearest rival Meers, and secondly, because in fact, the threat

* Lapa zamindari in Battai.

† Receiving half the produce and paying the Government rent.

by the land-holder to quit his lands, often stood him in good stead, when ill used or squeezed by his lord: I assume the right of giving land to others, when proved to have been out of cultivation, five consecutive years.

Compulsion is not now used; formerly, if a man once cultivated 1,000 acres, he was expected, under a penality to continue to do so yearly—then, as now, they were encouraged by reduction of rent to increase cultivation. No compulsion is used now.

Sub-tenants do not hold leases, nor do zamindars, defining their estates. The leases I have granted define simply the terms of rent cash or in kind. All mortgages are required to be registered here now, but it is not I believe required throughout Sind.

Captain Preedy, Collector of Karachi.

Zamindars and others, who after obtaining grants of waste land from Government or from the Kardar, have brought the same under cultivation, together with all persons, who have purchased the right of cultivating any portion of the land, possess a permanent, hereditary and transferable interest in their lands, so long as they cultivate them and pay the Government dues. If such lands are neglected, Government can either levy a cash rent on them, or can resume and make them over to others, who are willing to undertake their cultivation. No land can be sold in Sind except under the new Revenue Regulations which authorise the sale of a limited portion of land at 20 years purchase, the value being calculated, as if the land were under cultivation, *vide* Regulation 24, Civil Order Book—A Zamindar if unable through reduced circumstances or other causes, to continue to cultivate the whole of land granted to him and which he has previously brought under cultivation, is allowed to sublet a portion of it to an inferior zamindar or Mukadum; in this case the latter, besides paying the usual rent to Government pays to the zamindar under whom he holds the land 1/20th of the produce, called the Malkana or Proprietor's due. Lands sublet in this manner are always granted on lease, the number of years being specified in the written agreements exchanged by the contracting parties. The

zamindaree system as before observed, is that which generally prevails in my districts, to the great bane of the labouring classes. But for the exorbitant exactions of the zamindars and Mukadums no Ryots in the world could be more favourably situated, as regards external circumstances, than those of Sind. The cultivable land is for the most part exuberantly fertile; the harvest rapidly succeeds each other—little labour is required to prepare the land for the seed. The annual inundation seldom fails to afford an abundant supply of water for irrigation, and if a failure does occur, the rents being for the most part paid, in kind, Government suffers equally in proportion with the Ryots. Moreover as all the artificers and labourers with whom the Ryot has to do are paid in grain, he has no need of money, an article which in less favoured regions cannot by any possibility be dispensed with. The Zamindari and Mukadumee systems resemble each other—both are equally oppressive and grinding to the labourer and description of one will answer for both. Zamindari lands are usually divided into a number of small farms which are let out to poor tenants on condition of their paying certain portions of the produce to the zamindar, in addition to the Government share—at harvest time the zamindar in the first instance settles for the produce of the whole of his lands with the Government officers and afterwards settles with his tenants. On the amended Revenue System, supposing the zamindar to provide his tenant with cattle and ploughs, the Battai or division is managed as follows. The Government share $\frac{1}{3}$ or $\frac{1}{4}$ as the case may be, with the 'Kurrutch' and 'Hakkabba' are first deducted and removed by the Government officers. The zamindar then divides what remains with his tenants. A certain portion of grain is first taken out and set aside for the next year's seed and for the pay of smiths and carpenters and grain watchers. The zamindar next appropriates about half the remainder to himself, on account of his "Malkana" and rent, and in consideration of the cattle and ploughs supplied to the Ryot. He next calls for his 'Putwalee' or Bunyah, who has by his order supplied the Ryot either with grain or money during the year, and after ascertaining the amount standing against the latter, deducts the same from the remainder of the grain, at his—the zamindar's—own price; the amount including former debts, with

interest at two per cent. per mensem, greatly exceeds the value of the grain in most cases. A part of the grain therefore is made over to the Ryot for his subsistence during the coming year, the value of which is added to already overwhelming accumulation of the debt standing against the unhappy wretch in the Pattawalee's books. On cash rent lands the result is the same. The Zamindars or Mookadums settle with the Government officers and afterwards under various pretences appropriate the greater part, if not the whole of the produce to their own use. On the above system it is evident that the Ryot can never free himself from debt. The zamindar for his own interest affords him a scanty supply of food and clothing and he is nominally his tenant, but in reality the great majority of Sind Ryots are nothing more or less than mere serfs of the soil. No register has hitherto been kept of the sale or transfer of the right of cultivation in the districts but at Karachi the sale and transfer of the right of cultivated land are duly registered. The cultivable land near Karachi is assessed at one rupee per mensem on every ten Napier Beeghas; the right of occupying as is the case with all cash rent lands is not forfeited by the holder neglecting to cultivate, so long as he regularly pays the rent. No compulsion is used to maintain the extent of cultivation and cultivators can relinquish their lands at pleasure.

Query No. 10. Has any general survey been made of the land and under what Government and on what principles?

Captain Rathborne, Collector of Hyderabad.

10. A great portion of Jagheer lands was measured in the Meers times and many Jagheers not then measured, have been measured by the officers of this Government since. Meer Naseer Khan too did, many years ago, have an account taken of the number of Beeghas of his share of Sind which were then in cultivation, but nothing in the nature of a proper survey has been made. I believe one has been commenced by the Superintendent of Forests and Canals, but I have not been acquainted with the progress made in it.

Major Goldney, Collector of Shikarpur.

10. None—Captain Baker Bengal Engineers, surveyed, I believe the canals, but there was no copy of his plans, if any, of Upper Sind in the Canals and Forests office here,

during 1847. Major Jacob surveyed Upper Sind and has published an excellent map by Trignometrical survey.

Captain Preedy, Collector of Karachi.

No general survey appears ever to have been made of the land, under any of the former Governments.

Query No. 11. Are there uniform weights, measures and coins in use and what are they?

Captain Rathborne, Collector of Hyderabad.

11. The standard of weights, measures and coins is uniform. The coin is the Company's currency, though the old Hyderabad Rupee passes to at its value according to the rates of the day. The weights are the Indian seers of 80 tolas, and the measure the Shahdadpur Toya of three seers 11/16ths of a seer of 85 tollahs. The Guz for measuring canal digging was fixed in this Collectorate at a uniform measure of 45 inches; but I believe the Superintendent of Canals has since returned to the old measures for canal-digging. The uniform Ryotee Beegah is the Napier Beegah of 2,500 square yards, but the measurement of Jagheers is still made by the Beegah used in first granting them. These are the weights and measures invariably used by the officers of Government and mostly by the people among themselves: but as there is no interference or question where there is no complaint, it is possible that in some localities the old weights and measures may be still in use.

Major Goldney, Collector of Shikarpur.

The Company's standard for weights is in force, the ancient dry measure, is that of the Province. The British rupee and its fractions, silver and copper are the established coin and circulate freely; copper is as usual, at a discount, now 64 pice per rupee.

The country coins circulate and are received by Government as revenue, at a fixed rate as compared with the Company's rupee—this scale is at present 2 or 3 per cent. in favour of the former, paying in country coin although large quantities of country rupees have been remitted to Bombay, there are still numbers of Goomdee rupees in circulation.

Captain Preedy, Collector of Karachi.

Uniform weights, measures and coins have been ordered to be used and the two latter are generaly in use, but the former, the weights, are as yet only partially in use. The weights are the seer of 80 Company's rupees and the Indian maund of 40 seers—by these weights, the Government share of the grain is now received instead of by measurement as formerly.

The measures are the Shahdadpooree Kurwar, which are divided as follows :—

4 Chowtaees	make	1 Pattoee.
4 Pattoees	„	1 Toya.
4 Toyas	„	1 Cassa.
60 Cassas	„	1 Kurwar.

A Kurwar of best wheat weighs on an average averdupois 2,061 lbs.

The Company's head rupee, and the new Copper Currency are now in general circulation throughout my districts—but all Sindhi coins are received in payment of revenue.

Query No. 12. What is the nature of the village accounts and revenue records? In what language are they kept? Are receipts given by the several parties throughout the time of collection?

Captain Rathborne, Collector of Hyderabad.

12. The public accounts are the Battai Kusseras, showing what has been levied in kind at the Battai. The zubt Kassera showing the amount of cash rent taken by measurement, of those kind of crops that pay cash—and the Kardars Jummo Waslee or account current, showing the miscellaneous receipts and expenditure. Then there are the Customs accounts which form a separate department immediately under the Collector. There were besides the canal accounts which have been transferred to the Superintendent of canals except those relating to the Collector of water tax, which remain with the Collector.

The whole of the Government accounts and records are kept in Persian; and the records besides the above, contain copies of all Jagheer grants—the measurement of Jagheers where measured—the pay given formerly to Baluchees—the account of the Meers' valuables and the allowances made to their household. The records have not come perfect into our hands; but if they had, there is scarcely a point connected with the expenditure, public or private, of the Ameers, that they would not have shown—as it is they furnish vast mass of information.

Receipts are always given by the Purgunnah officers to the cultivators for the amount they pay; and in this Collectorate the principal zamindars affix their signature or marks to the account sent in to the Collector and are personally responsible for any fraud that may be committed.

Village accounts are kept in Sindhi but all Government records in Persian.

Major Goldney, Collector of Shikarpur.

At present the village accounts so far as we are concerned consist of measurement papers and Battai papers, the former for cash, the latter for corn rents. Receipts for revenue are granted by District treasurers countersigned by Kardars and to be valid in Upper Sind must be presented for countersignature by the Deputy Collector within 15 days after they be granted.

Monthly accounts in duplicate of receipts and disbursements for the preceeding month are sent in on the first of each month by the Kardars, the original being forwarded to the Collector's office and the duplicate to the office of the Deputy Collector. In these accounts credit is afforded for the amount of cash rents received, for instalment paid by the purchasers of Government grain, for instalment paid by fishery, liquor and drug contractors, for fines levied by order of the Collector or Deputy Collector. Amounts realised by the sale of unclaimed property while under the head of disbursements, sums paid to the Collector, Deputy Collector and their office establishments, to the Kardars and their Purgunnah establishments, for the petty repairs of chowries, for stationery are

Captain Preedy, Collector of Karachi.

debited after the Battai or division of the produce of each harvest; accounts are sent in by the Battaidar of each Purgunnah and by the zabit or land measurer, the former showing the quantity of grain realized as the Government share and the latter, the quantity of land paying cash rents and the amount due on the same and which the Kardar collects. The correctness of both these accounts is vouched for by the Kardar and zamindars, who affix their seals to them. The whole of the above accounts are kept in Persian. Receipts are given by the Kardar for all cash rents received but no receipts are passed by the battaidars for the grain received, the Kussera accounts to which the seal of each zamindar is attached, are considered sufficient vouchers.

Query No. 13. What other classes compose the inhabitants of the village, besides the cultivators of the lands?

Captain Rathborne, Collector of Hyderabad.

13. Besides the cultivator of the land, there are Fakirs and Moolahs, village Bunyahs, Potters, Carpenters, Blacksmiths, and Barbers where the village is considerable, but though cultivating is not the profession of these people so much as that of the professed cultivators, there are few to be found in any village who have not something to do with the cultivation of land, either directly or as having advanced money on it. In the larger towns of course, there are many whose trades or occupations and mercantile concerns are on so large a scale as to absorb all their time and these take no part whatever in cultivation.

Major Golney, Collector of Shikarpur.

The ordinary classes of a village in Hindoostan who like them are more or less cultivators of the soil.

Captain Preedy, Collector of Karachi.

The other classes which compose the inhabitants of a village, besides the cultivators of the soil, are Carpenters, Smiths and Bunyahs, Jhuts, Weavers, Dyers, Salt Manufacturers, Tanners and Shikarees or Sweepers. A few Syeds are found located in each village. The latter are for the most part cultivators, and are by far the most influential part of the population.

Query No. 14. What are the other sources of revenue besides land? Have all extra cesses, transits, town duties, and personal taxes been abolished? Is any revenue derived from the sale of spirituous liquors or intoxicating drugs? If so, what is its amount and on what principles regulated? Is there any revenue from fisheries and how is it regulated? Is any revenue realized from judicial proceedings, and in what form? What are the several heads under which Revenue is credited in your accounts, and of what is each composed?

Captain Rathborne, Collector of Hyderabad.

14. The sources besides land are Customs, Abkari, Fisheries and several small items under the head of miscellaneous, being house-rent; fines, forfeitures, auctions, sales of stray cattle. There are besides, garden rent and water tax, but they come properly speaking under the head of land revenue. All extra cesses—transit and town duties and pesonal taxes—have been abolished. A revenue amounting to 67,000 rupees for the year 1847, is levied on the sale of spirituous liquors and drugs. It is levied on the principle of Bombay Regulation No. XXI of 1827 and a Regulation of the Government of India to the same purport. In this collectorate the liquor, opium and drug farm is sold to a contractor, who pays the revenue in "kists" of a twelfth of the year's amount monthly.

A revenue of Rs. 27,438 was derived in 1846 from Fisheries. The contract for the privilege of fishing at each "Meanee" or fishing station in the Indus is sold by auction—the contractor pays the amount in six monthly "kists;" and levies from the fishermen 2/5th or 1/3rd of the fish caught within his range according to the amount that may have been fixed by former custom—Petty fisheries as in tanks and canals are sold by the Kardars and paid for at once. A fee of five per cent. on the amount adjudicated on, is levied on civil suits and credited to Government but nothing is levied on the recovery of stolen property. Under the Ameers Government fees *ad libitum* were exacted in civil suits, and 25 per cent. was deducted from all stolen property recovered. There being no stamps or other law expenses in Sind, it was thought better by our Government to keep up this slight tax on judicial proceedings than to have litigation altogether free of charge. The

several heads under which revenue is classed in Sind are land-customs, Abkari, Garden rent and miscellaneous; under the head of Miscellaneous all the petty items come, not classed under any of the great sources of income.

We follow in the matter of accounts the forms laid down for Collectors under the Bengal Presidency as furnished by the Accountant-General Fort William.

14. Besides Land revenue, we have Import and Export duties, Garden rents, Fisheries, Excise.

Major Goldney, Collector of Shikarpur.

All extra cesses, transit and town duties and personal taxes were abolished in January 1846. The arrears of some of these are still in progress of collection, but none else; I consider the Roree gardens Taxes reported on at large, on 28th October 1847, as in lieu of garden rent and as such I levy them.

An average revenue of Rs. 22,178-10-8 as per item 6, page 4, is derived from the Excise, and was formerly sold annually to contractors by auction.

The only persons who could come forward for these contracts were distillers, and of those the number being very few, they formed such a combination that the hopes of competition were fruitless. In April last the contract for 1846-47 expired, and notice of sale was given for 1847-48, but on the day appointed, the only offer made was by the old contractor at a price considered far below the relative value, the bidder had obtained sufficient influence to deter others from coming forward.

To abolish this combination, the sanction of Government was obtained to erect a Sudder distillery and abolish all petty out-stills, concentrating as much as possible the manufacture and stores of all excisable articles.

This plan has been adopted with success in Shikarpur and neighbouring villages including Sukkur and Ghotkee. The revenue is taking a gradual and wholesome monthly rise. The excess collections in August last, over contract, was 490 rupees, that in September 710 rupees.

When once the concentration of all excisable articles is complete, the district license system with Sudder distillery sanctioned by the Supreme Government for Bengal in 1840 and carried out with such eminent success, can be readily introduced. In some instances villages which under the contract system only yielded a tax of 5 rupees monthly now supply a monthly revenue of 137 rupees. Two Deputy Collectorates still remain in under the contract system (*viz.*, Larkana and Mehar) a fee of 5 per cent. on all sums realized by virtue of a civil suit, is levied by Government for Head of revenue.

Captain Preedy, Collector of Karachi.

The other sources of revenue besides land, are Customs and taxes—

Liquor and Drug contracts,
Fishery and Ferry contracts,
Fees and fines,
House and market rent,
Confiscated and unclaimed property.

All extra cesses, transit and town duties together with personal taxes have been abolished. Revenue is derived from the sale, both of spirituous drugs and of intoxicating drugs. The sales of both are given out in contracts, the contracts being publicly sold by auction to the highest bidder. The amount realized last year 1846/47 from the contracts for the sale of drugs Rs. 7,631-7-1. Fisheries are farmed out to contractors; they also are sold by auction to the highest bidder. The contractor levies the Government share of all fish caught either 1/3rd or 2/5ths according to the custom of the Purgunnah in which the fishery may be situated. Five per cent. is levied on the amount litigated in all civil suits. All fines levied in criminal cases are credited to Government. The following is the memo of the heads under which the revenue is credited in any accounts, as also of the items comprised under each head.

Land Revenue.—Being receipts on account of sale of grain, the produce of the Collectorate, and Cash rent payments.

Inland Customs.—On account of customs duties levied at the Frontier Chowkies.

Registry fees.—On account of sale of land or houses.

Taxes.—On account of manufacture of salt and on boats conveying merchandise and passengers across Lake Munchar.

Garden Rent.—On account of sale of the produce of Government gardens in the districts and tax on gardens in the vicinity of Karachi and Malir.

Liquor contracts.—On account of exclusive privilege for retail of liquor.

Fishery contract.—On account of exclusive privilege of collecting the Government share of fish taken.

Ferry contracts.—On account of exclusive privilege of collecting the Government share of fees on passengers, animals and goods, crossing the river.

Drug contract.—On account of exclusive privilege for retail of Churush, Opium, Ganja, Bhang, "Khas Khas" and "Myjoon."

Miscellaneous Revenue.—Comprising receipts on account of Government share of babul pods, reeds and birds caught at Lake Munchar, sold—also water-tax collected from the Jagheerdars and 2 annas per beegah from the sons of Jagheerdars deceased, on account of waste land.

Fines.—Levied in criminal cases and for trespasses.

Fees.—Levied on civil suits.

Confiscated property.—Comprising receipts on account of smuggled property sold.

Unclaimed property.—Comprising receipts on account of stray-cattle sold, for which no owners are forthcoming, after due notice being given of their seizure.

Debt recovered.—On account of sums due to Ex-Ameers at the time of the conquest.

House rent.—On account of rent of Deputy Collectors' bungalows.

Query No. 15. In how many districts your Collectorate is divided and what is the nature and the amount of the native agency by which they are managed? What is the average extent and revenue of each native District Officer's charge? What accounts are kept in the District Kucherries? Is any money paid into the Treasury of the Native District Officer, and if so, how is it remitted to the Collector's Treasury?

Captain Rathborne, Collector of Hyderabad.

15. The Collectorate is divided into 56 Kardarates, embracing 91 Purgunnahs—To each Kardarate there is a Kardar with one or more "Mohurrirs," "Moonidars" and "Kotars" according to the size of the district. There is also an ambardar, who under the Kardar, holds charge of the grain. The extent and revenue of each kardarate varies so widely that it is impossible to give any just notion of them by an average. They vary from 4,000 Kurwar of produce to 150, and from 40 miles of length to a little more than two

The only account kept by the Kardar after the harvest Cussuras have been sent in, in his 'Jumma Waslee' or account of receipts and expenditure, cash rents, water tax and fines. The rents for gardens also here and there, and fisheries are paid to the Karadars who transmit the money by one of their servants to the Collectorate Treasury at Hyderabad.

In Upper Sind are 4 districts—

Major Goldney, Collector of Shikarpur.

Shikarpur,
Sukkur,
Larkana,
Mehar

a fifth Ghotkee existed, but on its two largest dependencies, Meerpur, Ubauro, being ceded to His Highness Meer Ali

Moorad, in March 1845, it became less important. Its Deputy was withdrawn to Headquarters in May 1846 and it is now under Deputy Collector of Sukkur.

For numbers of Kardars and average collections of each as per following statement showing number of Kardars and average collections of each in the Shikarpur Collectorate.

Names of Divisions.	Number of Kardars.	Annual. Pay with establishment of every description.	Annual. Average Collections.	Average. Salary of each Kardar's establishment.	Average. Collections of each Kardarate.
Shikarpur	6	9,720	1,53,000 6 4	1,620 0	25,500 0 0
Larkana	11	14,100	3,80,406 8 7	1,281 9	34,582 0 0
Mehar	9	10,308	2,46,084 2 2	1,134 2	27,342 0 0
Sukkur, Ghotki and Rohri.	7	8,772	2,35,873 3 2	1,252 8	33,696 0 0
Naushahro	1	1,656	48,000 0 0	1,656 0	48,000 0 0
Kushmore	1	360	2,984 3 2	360 0	2,984 3 2
Total average ...	35	44,916	10,66,348 7 5	...	...

Each Kardar keeps an account of receipts and disbursements of his division which he forwards with his collections to the Deputy Collector's Treasury; he is forbidden to retain a larger balance than 500 rupees in his hands. A horseman is attached to each Kardar furnished from the Jakhranee and Chandia Horse, attached to the Mounted Police, and these men act as escorts to the remittances in cash to the Deputy Collector's Treasury; bills are frequently used in the Ghotki and Mehar districts.

Captain Preedy, Collector of Karachi.

My Collectorate is divided into three districts and each district is sub-divided into Purgunnahs enumerated in replies to No. 1 Paragraph. The affairs of each Purgunnah are managed by a Kardar, who is assisted by one or two Munshis according to the extent of the Purgunnah he may

have charge of. The Purgunnahs vary considerably in extent and value, but taking the average of the whole, the extent of each Kardar's charge amounts to 941 square miles, and the revenue to Rs. 36,816 per annum. The following is a memo. of the Returns kept in each of the district kacheries and forwarded monthly to the Collector's office:—

Cash account current.

Salary bills.
Contingent bills.
Abstracts of pay to Kardars.
Statements of inefficient balance.
Statements of fines.
Reports of criminal cases.
Reports of civil suits.
Returns of prisoners in Jail.
Returns of grain in store.
Prices current.

Considerable sums are paid into the hands of the Kardars, and which are forwarded either to the Treasuries of the Deputy Collector or to that of the Collector direct, as may be ordered by the latter, under escorts of Police.

Query No. 16. How many Deputies have you? How are their charges and duties defined as regards revenue? Have they separate Treasuries and accounts or is there one only for the Collectorate?

Captain Rathborne, Collector of Hyderabad.

16. There are now six Deputy Collectors in this Collectorate. There were more but the Deputy Collectorate of Wanga Buzar has been added to that of Mahomed Khan Ka Tandra and that of Shahbunder is now held co-jointly with that of Laikpore.

The nature of their duties and the extent of charges will be best shown by the several papers of instructions which follow this reply, headed Nos. 1, 2 and 3, and which give a general outline of their revenue duties; besides which, they

perform the magisterial duties of their several districts. Of the two Deputy Collectors at Headquarters, one has charge of the Treasury and English accounts—he is the Deputy Collector in charge of the Treasury, on the principle followed in Bengal; the other takes the magisterial cases that come to me and also the Kotri magisterial duties, and examines and checks the sunnuds of Jagheerdars, a body so numerous in this Collectorate that their affairs take up fully half my time as well as a very large portion of the time of the second Deputy Collector at Headquarters.

The Deputy Collectors in the districts have separate treasuries; but as the Kardars send in all their large payments direct to Hyderabad, giving merely a memo. of the amount paid to the Deputy Collector of the District, the fisheries, abkari contracts, nearly all the grain sold, and a greater portion of the water-tax are settled for at Hyderabad. There is, in point of fact, very little paid into the Deputy Collectorate treasuries, and their charge in this respect is almost nominal. Indeed it has always been my policy to encumber Deputy Collectors with anything that would confine them to one place as little as possible. All the details of account work and Treasury work can be much better done at Headquarters than by them. Their great use and duty is to move about as much as possible, see into abuses with their own eyes and suggest the means of amendment.

No. 1.

Instructions to the Deputy Collectors of Hyderabad regarding the collection of grain in that Collectorate.

1. Deputy Collectors should always bear in mind that they are placed in the districts as a check upon the Kardars and other native subordinates and not to supersede their functions. They will therefore not interfere with these people in their ordinary duties, except to prevent oppression towards the ryots on the one hand and fraud towards Government on the other, but they will exercise a general supervision on them.

2. Battaidars with Mohurars and zabits will be sent on the 1st proximo from Hyderabad into every Purgunnah in the Collectorate who will make the Battai and forward their

Cassera papers to the Collector, leaving a copy with the Deputy Collector of the district in which the Purgunnah lies.

3. These papers will be checked by a reference to the Buttai and Zabit accounts of former years in the Collector's office, and it will be the duty of the Deputy Collectors in their tours through the districts to ascertain by personal inspection how far the Battai and 'Zaptes' as made by the Battaidars and Zabits correspond with the actual quantity of ground cultivated and its produce this year. Until a regular survey is made of the whole country, this can never of course be ascertained to a nicety, but enough may be done by a careful inspection, aided by information gained from the cultivators, to discover cases where gros fraud is committed or attempted: and, in the event of Deputy Collectors finding any such case, an immediate report should be made to the Collector.

4. Ambardars will be similiarly appointed from Hyderabad and into their charge the grain as estimated by the Buttaidars will be given; and, when the whole has been collected, instructions will be issued by the Collector regarding its disposal. The Deputy Collectors will visit the granaries in their progress, and report anything they may perceive defective.

5. After the grain has thus been collected and given in charge of the Ambardars, the several Kardars will come in with their accounts to the Headquarters according to former custom, leaving a copy of the same with the Deputy Collector of the district.

6. The Deputy Collectors will then go over the Kardars', the Ambardars', the Buttaidars', and the zabits' duplicate reports, (the original being sent to the Collector) and, aided by their own personal observations, ground a special report to be sent in as early afterwards as possible, on each Purgunnah they may have visited within their districts, noting the native subordinates who have proved themselves good servants and those who appear to have been guilty of fraud or oppression. They will add any remarks on the system in general, and suggestions for improvement that may occur to them. This report should specially include memoranda regarding the quantity of waste land in each Purgunnah with remarks regarding its capabilities for cultivation, particularly noting whether any, and if so, what extent

of new canal would be necessary, or what other expenditure would be required for that purpose.

7. No person on the establishment of any description is either to be entertained or dismissed except on sanction previously obtained from the Collector, but reports should be made of the conduct of all within each Deputy Collector's district who may on the one hand appear specially to merit approbation, or on the other, to deserve censure or dismissal.

8. No new grants are to be made or old ones recognized, nor is any expenditure to be incurred or public property disposed of, without the same sanction; but Deputy Collectors will in all cases report where an additional expenditure appears absolutely necessary and also what savings they may think may be made on the present system consistent with efficiency.

9. All payments will be made by the Kardars and Ambardars direct to the Collector's Treasury at Hyderabad.

10. A weekly report to the Collector should be made during the harvest season by each Deputy Collector, giving a general view of the state of cultivation in the districts he may be then on his progress, remarking anything worthy of note. This may be written in the form most convenient, either official or private, but should be on foolscap paper with a margin to admit of filing.

NO. 2.

In order to assimilate, as much as possible, the duties performed by Deputy Collectors in the Hyderabad Collectorate to those performed by the Deputy Collectors in the Collectorates of Sind, the following rules are promulgated and are to be implicitly followed by the Deputy Collectors of the Hyderabad Collectorate.

Under the Government of the Ameers, the accounts of the revenue collected in kind and of the land tax on vegetables, garden ground, sugarcane fields called "Dhul ka Zummeen" were rendered twice a year, namely, after the completion of the Battai of the Rubee and Kharif crops or during the months of January and July. The whole of the Kardars, Battaidars,

Ambardars, etc., with their Moonshees present themselves at these seasons at Hyderabad, where within the space of about a month the whole of their accounts were adjusted.

Deputy Collectors will each adopt a similar practice in future, and direct the public servants above mentioned to attend, at any place most convenient within their respective districts, to render their accounts for the Rubee collections so as to enable the Deputies to close and send them off to me on or before the 31st July, and for the Khareef collections, on or before the 31st January in each year. The monthly collections on account of customs, taxes and fines, the Deputies will close and despatch to my office on or before the 6th of each month. The accounts sent in monthly and all contingent charges, together with the accounts of the land tax, levied in money, I require to be translated in English previous to their being forwarded. The half yearly accounts of grain collections need not be translated, but an abstract of them in English is to be made. Deputies should be most particular that the Farmers of Customs pay their monthly 'kists' or instalments with regularity and on the very day of their becoming due; and Deputy Collectors will henceforth draw pay for and pay the whole of their establishments and of the establishments of the Purgunnahs in their charge.

Deputy Collectors are requested to submit the names of persons to be appointed Battaidars, Zabits and Ambardars, should there be any peculiarly qualified residing within their districts where the Kardar may not be entrusted with the Buttai and measurement of the crops in their own Purgunnahs. The above public servants should all be in readiness to proceed into the different Purgunnahs for the purpose of making the Battai on the 1st of April for that of the Rubbee, and on the 1st of October for that of the Khareef crop.

As the Buttai of some Purgunnahs will be finished much earlier than that of others, the papers and accounts of the former should be despatched to me at once, and should not be kept waiting for the latter. A report should accompany these accounts, stating in what manner the different servants employed have conducted themselves and how they have performed their work, and an abstract for each man's pay forwarded for adjustment at the same time.

In the event of the Deputies English writers falling sick and their being unable to translate the accounts of the former month before the 6th of the current month, they will have the goodness to forward them to me untranslated a Persian copy, sending the translation as soon afterwards as possible.

All contracts for the farm of customs and all tenders for the purchase of grain will be taken by the Deputy Collector of the district, but require to be submitted for my sanction previous to the agreement being finally concluded.

All cash received by Deputy Collectors to be transmitted at once to the Headquarters, so as to leave no balance in their hands and make any distinct treasury establishments necessary

Deputy Collectors will endeavour as far as possible to ascertain by personal inspection how far the Butai and Zupt as made by the Buttaidars and Zabits, agree with the actual quantity of ground cultivated and its produce during each season, and will make a special report after the conclusion of each Khareef and Rubbee Buttai on the subject.

On or before the 1st November Deputy Collectors will have the goodness to report the amount required by each Kardar for the purpose of cleaning out the water-courses, and at the same time will state whether any, and if so, what extent of new canals will be necessary, forwarding an estimate of the probable expense and of the probable return to be expected by Government.

When it is necessary to construct bunds, an application to Government must be made through me previous to the work being commenced; and Deputy Collectors in forwarding their applications will be particular in stating the probable expense of the work and what proportion of the work should be borne by Jagheerdars. They will also state the probable amount of benefit which will result to Government from the construction of the bund.

In the event of any cultivator applying for waste land, Deputy Collectors will first ascertain whether or not the land applied for has ever been granted to a zamindar; and should it

prove to have been granted, they will summon the zamindar, and having ascertained the correctness of his title, will enquire of him whether or not he will cultivate the land; if he replies in the affirmative, the applicant of the land should have a portion assigned him in some other quarter, but if the zamindar refuses to cultivate the land required, it should at once be made over in Ryotee to the applicant. If the zamindar neglects to cultivate the land, after promising to cultivate it, he must be charged at the usual money rate of the Purgunnahs, and no man should be allowed to occupy more land than he can cultivate.

Under the above rules the following are the papers to be sent to me periodically in addition to those now forwarded:—

Weekly.

(1) Memo. of weekly Government grain in store in the several Purgunnahs in charge of the Deputy, English and Persian.

(2) Price current of ditto for past week, English and Persian, and memo of present biddings for same.

Monthly.

(1) Statement of receipts and disbursements of each Purgunnah for the past month. In English and in Persian.

(2) Salary bills for establishment of each Purgunnah. In English and in duplicate.

(3) Contingent bills for contingent charges on account of each Purgunnah. In English and in duplicate.

(4) Salary bill for Deputy Collector's establishment.

(5) Contingent bills for ditto.

(6) Statement of fines levied.

(7) Return of alterations in establishment during the past month.

(8) Acquittance roll of establishments.

Half yearly.

(1) Buttaidars and Kardars Fusl accounts, in Persian with abstract of the same in English.

(2) Special report on the same.

Annually.

(1) Estimate of canal and bund expenditure for the ensuing year, in Persian with abstract in English.

(2) Complete roll of establishment showing the alterations during the past year.

(3) Confidential reports on the character of the several Purgunnah native officers.

The weekly returns will be made up to the Saturday night and forwarded on or before the ensuing Tuesday.

The monthly reports of tax collections are to be sent in on or before the 6th of each month, and the half yearly papers are to be forwarded on the days above ordered, and the other monthly papers may be sent in on any day before the 10th, and the annual estimate for canals and bunds must be sent on or before the 1st of November of each year, and the account must be made out for each Purgunnah separately.

Besides the above returns, the Deputy Collectors will furnish monthly on or before the 20th of each month, a casuality return of Jagheerdars holding Jagheers or residents in the Purgunnahs under their charge, giving the date of decease, the number and age of sons, if any, and amount of land held by them and which has thus lapsed to Government, and in which Purgunnah situated.

In consequence of the above additional duties thrown on the Deputy Collectors a new and more equal distribution of the

several districts is necessary, and the following new distribution of Purgunnahs is made in consequence :—

HALLA DISTRICT.

Captain Anderson.

Purgunnahs.

Chinejah.
Kittah and Dowlatpur
Dinejah.
Manejah.
Kund Chakarwah.
Laikghee Moobarickwah.
Wunjaree and Dahlee.
Halla.
Katee Kanote.
Ally Burr Jessoomer.
Shahwah Lohana.

MOHAMED KHAN'S TANDRA

Captain Jones.

Purgunnahs.

Suma Wattee.
Oodajandi.
Hingooranee.
Kurlee Tikoor.
Syedpur Ludhan.
Chowdra.
Khattar Ugamanee.
Kaskartyar.
Dundee Kokur.
Shahwah Mushrook.
Shahwah Mungoobee.
Jhole Dundee.

SHAHBUNDER.

Lieut. Jameson.

Purgunnahs.

Shahbunder.
Jati.
Chejah and Suttah.
Mangur.

MEERPORE DISTRICT.

Lieut. Forbes.
Captain Drummoned.

Purgunnahs.

Mattaree Kundoo.
Ally Burr Sangroo.
Sarfrazwah.
Emamwah.
Ropah Meerwah.
Nara Joonajanee.
Omerkote.
Shahgarh Khangarh
Camara.
Hoosri Burdo.
Katri and Sipia.
Ally Burr Khanwah.
Imamwah Peenoob.
Jooda.
Meerpur.
Allahyar and Nassurpur.

ALAMKA GOTH.

Lieut. Fenning.

Purgunnahs.

Bunna Laikpur.
Dutchur Wallishah.
Tye Mooradpur.
Keeral kot Almah.
Runta Bella.
Dadooki Chowria.
Korwah Galai.
Baerampur Seeranee.
Meerpur Bathoro.
Dookgaja.
Amrah Shakapur.
Kuddee.
Luckat Meerwah.

WUNGA.	WUNGA.—*contd.*
G. Wood, Esquire.	Looharee.
	Wullasu Kuddun.
Purgunnahs.	Kolree.
	Kuddera Khyrpoor.
Dadwa Jalar.	Shahdeewah.
Buddino Kulro.	Wangakuk.
Mandhur.	Chuchgaum.
	Irrandaka Share.

HEADQUARTER DIVISION.

Dooaba.

In carrying on the duties of their several districts, the Deputy Collectors must follow entirely the several Circulars or particular orders, whether in English or Persian; that may have been already or may be henceforward issued from the Collector's office, but they will correspond direct with the Kardars and collect and be responsible for the revenues of their several districts. In order that the Collector may be entirely and immediately acquainted with every step taken by them, they will, besides the weekly diary in English forwarded to the Governor, transmit me daily, Persian copies of all letters received by them from the several Kardars during the day, and their answers thereto, as I send to them copies of such papers at present.

There are two kinds of cases *re* which no orders ought to be given without reference to me; claims to Jagheers and claims of Jagheerdars to water from the Government canals.

3. The following alterations are made in the districts of this Collectorate:—

The Hoosri,
Katree,
Hingooranee,
Oadajanee,
Kurlee Tickoor,
Kutter Ugunanee and Kushkartyar,

Kardarates are attached to Hyderabad.

The Muttari Kardarate is joined to Halla district.

The Dadwah Jellar,
Buddino,
Kolree,
Ruddera Khurpoor,
Shadewah,
Wanga Kak,
Chuchgaum and Binda Kathair,

Kardarates are joined to the Mohamad Khan's Tadra district.

The Jundee Kokur Kardarate is joined to the Laikpur district.

The Mandhur,
Loharee,
Wallasa and Kuddam

Kardarates are joined to the Shahbunder district.

The necessary notifications to be made to Kardars and transfers made on office papers.

Hyderabad Collector and Magistrate's office, 9th July 1847. (Sd.) A. B. RATHBORNE, Collector and Magistrate.

Major Goldney, Collector of Shikarpur.

16. I have 5 Deputies, two at Headquarters and one at each of the three Deputy Collectorates, *viz.*, one for Sukkur, Rohree and Ghotkee, one for Chandooka or Larkana, one for Mehar, Tigr and Baghbhan.

The Deputy Collectors at Headquarters are employed as follows:—

Lieutenant Farrington in general duties and assisting the Collector; he is at present on a tour in the districts, immediately under Shikarpur.

Mr. G. Wood is in charge of the accounts of the Collectorate; he has also supervision of the Excise. On Lieutenant Farrington's return, he will proceed on a tour with a view, besides general business, to arrange matters relating to Excise at Mehar: he was long employed in the Opium and Excise Department in Bengal.

Deputies in charge of districts, have entire control of all revenue matters, subject to the revision and confirmation of the Collector at Shikarpur; they prepare all accounts of their districts in the form prescribed by the Collector; receive collections into their separate treasuries and remit them under escorts of regular troops from time to time as directed from Shikarpur; at Sukkur and at Larkana the Collector grants drafts on the Deputy Collector's treasuries for payment of the troops, which is a great convenience to all parties concerned; also the pay of the police detached into the districts is remitted through the Deputy Collector's treasuries.

Captain Preedy, Collector of Karachi.

16. I have three Deputy Collectors whose charges and duties are partly defined in the following extracts of letters of instructions. The Deputy Collectors have separate treasuries. Their accounts are also separately made out, but the whole are incorporated in the general monthly accounts of the Collectorate made out in my office.

Extracts form a Circular letter from the Collector and Magistrate of Karachi, to the Deputy Collectors, dated 30th August 1844.

* * * * *

2. Under the Government of the Ameers, the accounts of the revenues collected in kind and of the land tax on vegetables, garden ground, sugar-cane fields, &c., called "Dhull-ka-Zummeen" were rendered twice a year after the completion of the Battai of the Rubbee and Khareef crops, or during the months of January or July. The whole of the Kardars, Battaidars, Ambardars, &c, with their Munshees presented themselves at these seasons at Hyderabad, where,

within the space of about a month, the whole of their accounts were adjusted.

3. I have the honour to request that you will each adopt a similiar practice in future, and direct the public servants above mentioned to attend at any place most convenient within your respective districts, to render their accounts for the Rubbee collections so as to enable you to close and send them off to me on or before the 31st July and for the Khareef ditto on or before the 31st January in each year. The monthly collections on account of customs, taxes and fines, I shall feel obliged by your closing and despatching to my office on or before the 6th of each month. The account sent in monthly and all contingent charges together with the accounts of the land tax levied in money, I require to be translated in English previous to their being forwarded. The half year accounts of grain collections need not be translated. You should be most particular that the farmers of customs pay their monthly 'kists' or instalments with regularity and on the very day of their being due.

4. You will appoint your own Battaidars, Zabits and Ambardars, subject to my confirmation and will provide your own 'Toyahs' when those sent out by me require to be removed. The above public servants should all be in readiness at any place most convenient to proceed into the different Purgunnahs for the purpose of making the battai on the 1st of April for that of the Rubee, and on the 1st of October for that of the Khareef crop.

5. As the battai of some purgunnahs will be finished much earlier than that of others, the papers and accounts of the former should be despatched to me at once, and not kept waiting for the latter. A report should accompany these accounts, stating in what manner the different servants employed have conducted themselves, and how they have performed their work; on receipt of which report the amount of each man s pay will be fixed by me in accordance with the rates recorded in the Ameers Duftars, due reference being at the same time had to your report on their conduct.

6. In the event of your English writer falling sick, and you being unable totranslate the accounts of the former month

before the 6th of the current month, you will have the goodness to forward them to me untranslated

7. All contracts for the farm of customs, and all tenders for the purchase of grain will require to be submitted for my sanction previous to the agreement being finally concluded.

8. You will receive instructions monthly from me relative to the disposal of the balance of cash in your hands.

9. All questions of a public nature submitted for my decision to be written on foolscap paper, a broad margin being left for my replies.

10. You will endeavour, as far as possible, to ascertain by personal inspection, how far the Buttai and Zupt, as made by the Battaidars and Zabits, agree with the actual quantity of ground cultivated and its produce during each year.

11. On or before the 1st of February you will have the goodness to report the amount required by each Kardar for the purpose of clearing out the water-courses, and at the same time will state whether any, and if so, what extent of new canals will be necessary, forwarding an estimate of the probable expense and of the probable return to be expected by Government.

12. When it is necessary to construct bunds, an application to Government must be made through me, previous to the work being commenced; and in forwarding your applications, you will be particular in stating the probable expense of the work, and what proportion of the expense should be borne by Jagheerdars. You will also state the probable amount of benefit which will result to Government from the construction of the bund.

13. In the event of any cultivator applying for waste land, you will first ascertain whether or not the lands applied for have ever been granted to a zamindar; and should it prove to have been granted, you will summon the zamindar, and, having ascertained the correctness of his title, will enquire of

him whether or not he will cultivate the land; if he replies in the affirmative. the applicant for the land should have a portion assigned him, in some other quarter; but, if the zamindar refuses to cultivate, the land required should atonce be made over in ryotee to the applicant. The boundary should be marked out, and a sanad should be given to the ryot, stating the number of the Jerrebs made over to him, and the portion of the produce to be paid as the Government share. No man should be allowed to occupy more land than he can cultivate. Any further instructions which may be necessary will be communicated hereafter.

(Sd.) H. W. PREEDY, Captain,
Collector and Magistrate, Karachi.

CIRCULAR.

No. 79 of 1846,

To

The Deputy Collectors.

Gentlemen,

I have the honour to enclose, for your information and guidance, a form of a treasury account, which I request you will have the goodness to prepare and furnish me with monthly, commencing from the 1st of January 1846.

On receipt of the Persian accounts of your Purgunnahs they will continue as usual to be translated by your office in detail, and the different totals merely will require to be filled in, in the treasury account, under their respective heads.

The several statements hitherto furnished by your office will from the above date be discontinued.

The copy of Persian accounts forwarded to my office will likewise be translated by me and the totals compared with those inserted in your treasury account, and the Kardars must be directed to be careful that the copies of their accounts forwarded to Karachi do correspond with those submitted to you.

The discontinuance of the statements will I hope considerably lighten the duties of your office, while at the same time the rough translations made in your office should serve as a check on the Kardars' accounts and should be carefully secured and those of each Purgunnah kept separate.

The accompanying form appears so explanatory in itself, and so simple of preparation, that I trust no difficulty will be experienced by you in furnishing me with your accounts as early, and as regularly, as possible; but, as the quick despatch of your accounts depends mainly on their early receipts from the Kardars by you, I request you will have the goodness, in every instance of negligence or delay on their part, to fine them heavily, and also to inform them that any repetition of their negligence will subject them to dismissal or perhaps to severer punishment for disobedience of orders.

In order further to remove all misunderstanding and to prevent future mistakes, I have the honour to request you will be pleased to consider all former letters from me on the subject of the preparation of accounts, or in any manner connected therewith, as cancelled, and to consider the undermentioned papers to be hereafter due by you, to the regularity in rendering which I must request your most particular attention.

Treasury account	Monthly.
Detailed particulars of inefficient balance.	Do.
Salary bill, in duplicate ...	Do.
Contingent bill in duplicate ...	Do.
Memo. of Kardars' establishments.	Do.
Police cases, in duplicate ...	Do.
Civil suits, in duplicate ...	Do.
Diaries	Weekly.
Digests	Do.

Memo. of grain in store	...	Monthly.
Price current of grain	...	Weekly.
Statement of fines	...	Monthly to correspond with those shown as levied in Police cases.

In your Contingent Bills, you will have the goodness to include the contingencies of each kardarate under its own head, and thus enter the charges in regular order throughout the bill.

No charges for cutting and clearing canals are to be made by you in your Treasury account, until the receipt of advice from me. The Persian accounts of the canals to be sent direct to me in detail.

In conclusion, I request you will be good enough to make your arrangements so that your monthly accounts may reach my office by the 15th of the succeeding month.

I have, &c.,

Krachi, Collector and Magistrate's office
26th February 1846.

(Sd.) H. W. PREEDY,
Collector and Magistrate.

Query No. 17.—What accounts are kept in your own office, both in the native and English languages? To whom and under what regulations and control are your accounts of receipts and disbursements and estimates of resources and liabilities rendered? What is the strength and duties of your office establishment.? How is the surplus revenue remitted to general Treasuries, by Bills or in cash?

Captain Rathborne, Collector of Hyderabad

17. The native accounts kept in my office are the Purgunnah accounts described at page 91 as being sent in by the Kardars. A Jagheer account of proceeds of lapsed estates and shares in

estates—the Customs accounts kept in the Customs Department and the auction sale account kept by the Treasury Moonshi.

The English accounts are a daily account of receipts and disbursements, a monthly account current, an account of grain sales, canal expenditure, expenses incurred in each Purgunnah, and of grain in store; also, accounts of all leases, contracts, and sales by auction. My accounts of receipts and general disbursements are rendered to the Accountant-General, and Civil Auditor, Bengal, and are under their control; and my accounts for canal expenditure and buildings are sent to the Military Board at Bombay. There are no estimates of resources and liabilities rendered to any one, or any estimate; but annual regular and sketch estimates, which are sent to the Secretary, Sind Government, for transmission after embodiment in the general estimate for the Province, to the Accountant-General, Calcutta.

A list of my office establishment is as follows:—

List of the officers and establishments of the Hyderabad Collectorate.

No. of individuals.	Description of service.	Salary per month.	Total of each Department.	Total.	Remarks.
		Rs. a. p.	Rs. a. p	Rs. a. p.	
	HEAD QUARTER.				
	Captain A. B. Rathborne, Collector and Magistrate ...	1,200 0 0	...	...	Consolidated.
	C. Curling, Esquire, Deputy Collector and Magistrate ...	500 0 0	...	...	
	Lieutenant Stack, Deputy Collector and Magistrate ...	700 0 0	2,400 0 0	...	Do.
1	Head Clerk	150 0 0	..	...	
1	Clerk	120 0 0	...	..	
3	Clerks at Rs. 100 each ...	300 0 0	..	...	
1	Clerk	75 0 0	645 0 0	...	

No. of individuals.	Description of service.	Salary per month. Rs.	a.	p.	Total of each Department. Rs.	a.	p.	Total Rs.	a.	p	Remarks.
	NATIVE OFFICE.										
1	Head Moonshee ...	200	0	0	...			...			
1	Second Moonshee ...	100	0	0	...			...			
1	Moonshee	75	0	0	...			...			
1	Moonshee	70	0	0	...			...			
2	Moonshies at Rs. 60 each ..	120	0	0	...			...			
13	Moharars at Rs. 20 each .	260	0	0	..			...			
1	Dafturbund	8	0	0	...			...			
1	Ferash	7	0	0	...			...			
1	Shroff	60	0	0	...			...			
1	Assistant Shroff ...	15	0	0	...			..			
1	Kazi	45	0	0	...			...			
1	Daroga	20	0	0							
					980	0	0	...			
	PEONS.										
1	Havaldar	10	0	0	..			...			
15	Peons at Rs. 7 each ..	105	0	0							
					115	0	0	...			
	CUSTOMS DEPARTMENT.										
1	Head Moonshee ...	100	0	0	...			...			
4	Moonedars at Rs. 50 each ...	200	0	0	. .			...			
1	Moharar	20	0	0	..			..			
10	Gomastas at Rs. 25 each ...	250	0	0	.			...			
9	Gomastas at Rs. 15 each ..	135	0	0	.			.			
16	Peons at Rs. Rs. 7 each ...	112	0	0							
					817	0	0	.			
	GOVERNMENT GARDENS.										
9	Gardeners	45	12	11	..			..			
51	Labourers	109	3	1							
					155	0	0	5,112	0	0	

No. of individuals.	Description of service.	Salary per month.	Total of each Department.	Total.	Remarks.
		Rs. a. p	Rs. a. p.	Rs. a. p.	
	ESTABLISHMENT OF THE DEPUTY COLLECTOR AND MAGISTRATE, HYDERABAD.				
1	English Writer	100 0 0	100 0 0	...	
	NATIVE OFFICE.				
1	Moonshee	60 0 0	...	...	
1	Moharar	30 0 0	.	..	
1	Assistant Moharar ...	15 0 0	105 0 0	...	
	PEONS.				
1	Naik	8 0 0	...	...	
6	Peons at Rs. 7 each ...	42 0 0	50 0 0	255 0 0	
	DEPUTY COLLECTOR AND MAGISTRATE OF SHAHBUNDER.				
	W. T. Cole Esquire ..	.	500 0 0	..	
1	English writer	...	100 0 0		
	NATIVE OFFICE.				
1	Moonshee	60 0 0	...	..	
1	Moharar	30 0 0	..	..	
1	Assistant Moharar ...	15 0 0	105 0 0	705 0 0	
	PEONS.				
1	Naik	8 0 0	...	...	
6	Peons at Rs. 7 each .	42 0 0	50 0 0	755 0 0	
	DEPUTY COLLECTOR AND MAGISTRATE, MEERPORE.				
	Lieutenant Jameson ..	700 0 0	..	...	Consolidated.
	English Writer	100 0 0	800 0 0	...	

No. of individuals.	Description of service.	Salary per month.	Total of each Department.	Total.	Remarks.
	NATIVE OFFICE.	Rs. a. p.	Rs. a p.	Rs. a. p.	
1	Moonshee	60 0 0	...	...	
1	Moharar	30 0 0	...	..	
1	Assistant Moharar ...	15 0 0	105 0 0	...	
	PEONS.				
1	Naik	8 0 0	...	.	
6	Peons at Rs. 7 each ...	42 0 0	50 0 0	955 0 0	
	DEPUTY COLLECTOR AND MAGISTRATE, MUHAMMAD KHAN'S TANDA.				
	Captain Fenning ...	700 0 0	.	...	Consolidated.
	English Writer ...	100 0 0	800 0 0	..	
	NATIVE OFFICE.				
1	Moonshee	60 0 0	...	..	
1	Moharar	30 0 0	...	...	
1	Assistant Moharar ..	15 0 0	105 0 0	...	
	PEONS.				
1	Naik	8 0 0	...	...	
5	Peons at Rs. 7 each ...	35 0 0	43 0 0	948 0 0	
	DEPUTY COLLECTOR AND MAGISTRATE OF HALA.				
	I. Curling, Esquire ...	500 0 0	...		
1	English Writer	100 0 0	600 0 0	..	
1	Moonshee . ..	60 0 0	...	..	
1	Moharar	30 0 0	.	.	
1	Assistant Moharar	15 0 0	105 0 0	..	

No. of individuals.	Description of service.	Salary per month.	Total of each Department.	Total.	Remarks.
	PEONS.	Rs. a. p.	Rs. a p.	Rs. a. p.	
1	Naik	8 0 0	...	...	
6	Peons at Rs. 7 each ...	42 0 0	50 0 0	755 0 0	
	DEPUTY COLLECTOR AND MAGISTRATE OF LAIKPUR.				
	Vacant	...	...	...	
1	English Writer vacant ...	...	...	...	
1	Moonshee	60 0 0	...	...	
1	Moharar	30 0 0	...	...	
1	Assistant Moharar ..	15 0 0	105 0 0	...	
	PEONS.				
1	Naik	8 0 0	...	...	
5	Peons at Rs. 7 each ...	35 0 0	43 0 0	148 0 0	
	Total ...			8,928 0 0	

Add—Pay of 57 Kardars, 94 Moharars, at 4 cassas per Kurwar, agreeably to the New Revenue Regulations issued by His Excellency the Governor of Sind, in February 1846.

(Signed.) A. B. RATHBORNE,
Collector and Magistrate.

My surplus revenue has hitherto been invariably paid into the Military Treasure Chest, Hyderabad, the officer in charge of which gives a receipt in duplicate, one of which is forwarded to the Treasurer in Sind, who adjusts the payment with the Military Pay Master at Karachi, and gives me credit in his accounts for a remittance to the Sind Treasury or the amount so paid in and forwards a receipt in duplicate. One of these receipts of the Treasurer in Sind is transmitted in my next month's accounts to the Accountant-General as a voucher, and then the transaction ends.

17. At Shikarpur the accounts received in English and Persian from the Deputy Collectors are examined, checked and condensed into one general account for transmission to the Accountant-General, Fort William.

Major Goldney, Collector of Shikarpur.

The first step of the accounts consists in registering the "Persian" measurement or "Battai" papers, as the case may be; for cash or corn rents—these are in Persian and are referred to as checks on the accounts.

My own immediate districts are treated as a separate Deputy Collectorate, and the accounts prepared in English and Persian both to correspond as follows:—

Account current of general receipts and disbursements of cash.

Account current of general receipts and disbursements of grain.

Account current of general receipts and sales of grain.

When the whole of the Deputies' accounts for a given month are collected and checked, a general account is framed and forwarded to the Accountant-General, Fort William.

No return of resources and liabilities has yet been called for in Sind. All surplus cash is paid into Military Chest direct, or by drafts on Deputies for payment of troops or Police. Country coin is remitted to Bombay by the Government steamers.

Captain Preedy, Collector of Karachi.

17. The following is a memorandum of the accounts kept in my office, both in the English and Persian languages:—

In English.

Monthly Report of Receipts and Disbursements for Sind Government. General cash account for Bengal Government.

Separate statements of land revenue, customs, taxes, town duties, garden rent, liquor and drug contracts, fishery, ferry, goldsmiths, orisidue, and weavers contracts, miscellaneous-revenue and collections on account of fees and fines, house rent and market rent, confiscated and unclaimed property and taxes. Cash balance report of Treasury, salary and contingent bills of Collector, Civil and Criminal Returns, price currents, customs accounts and accounts of grain sold. Statement of inefficient balance and Register of outstanding debts. General abstract of Kardars and their establishments, and abstract of pensioners.

In Persian.

Customs accounts, accounts of all contracts, fees on sale of land, cash rent and grain sold, fines and fees, confiscated and unclaimed property, salaries of establishments and contingent expenses. Outstanding debts and accounts of grain produce of Collectorate and Cussera, Battai, Zupt, and Nurruck accounts.

My accounts of receipts and disbursements are rendered monthly to the Civil Accountant-General of Bengal. The strength of my office establishment is as follows :—

1 Head Clerk whose duties are.		Translation of Persian accounts and petitions which require to be forwarded to Government; In charge of correspondence, and Criminal and Civil Returns, and Price current and general suprintendence of English and Native office establishments.
1 2nd clerk	...	Assists in preparation of accounts.
1 3rd clerk	...	General copyist.
1 4th clerk	...	Letter Book and Copyist of Price currents.
1 Head Munshi	...	To read all letters and urzees from the Kardars and others to the Collector,

	and to write his answers to the same. To write the Collector's orders to the Kardars, and to keep copies of the whole of the Persian correspondence.
1 2nd Moonshi ...	To make out the Persian accounts of the Collectorate and to assist in the translation of the same, to check the accounts of the Kardars forwarded direct and by Deputy Collectors.
1 3rd Moonshi ...	To assist the 2nd Moonshi in keeping the accounts, and to copy such as are required to be sent to the Deputy Collectors.
1 Duftarbund ...	To take charge of the whole of the Persian Records.
1 Shroff or Treasurer.	To receive all cash paid on account of Government into the Treasury, and to keep an account of the same as also of all disbursements.
1 Naik ... } 4 Peons ... }	For the general duties of the office.

The surplus revenue is remitted in cash to the general Treasury.

Query No. 18.—Do you devote any stated portion of the time exclusively to the public hearing of complaints? Are they recorded *viva voce* or in writing?

Captain Rathborne, Collector of Hyderabad.

18. I devote from 2 to 4 daily, Saturday and Sunday excepted, to the hearing of complaints, unless prevented by unavoidable business. The complaints are in writing and in duplicate if ordinary cases; but Sirdars and others too have often little requests to make or points to complain of—difficult to detail in a petition and then their wishes are expressed *viva voce*.

I admit any one that pleases at that hour to see me, and make what communications he has to make in person.

The Deputy Collectors are accessible always to every one during office hours.

I take no strictly magisterial cases myself, except now and then, if one that would occupy little time; as I have had, till lately, abundance to occupy me in complaints of a general nature, complaints of Sirdars connected with their Jagheer, petitions about assessment, the public accounts, going over the various trials and diaries, correspondence, and work of that kind.

Major Goldney, Collector of Shikarpur.

18. I devote every alternate day to complaints and trials: the others to Revenue and other business. The doors are open and, though written petitions are preferred as laying the matter before the Magistrate more briefly and distinctly, yet petitioner is at liberty to complain *viva voce* if he wishes if leisure permit, complaints are enquired into more or less every day.

Captain Preedy, Collector of Karachi.

18. The time I have devoted to the hearing of complaints, is from 12 to 2 p.m., but this has hitherto been insufficient, and I am frequently engaged during the great part of the day in listening to petitions which are received in writing, the parties presenting them, attending personally to deliver them.

Query No. 19.—What is the general character of the Native Agency employed under you? Is it chiefly composed of foreigners or natives of the country? Have cases of malversation, peculation or abuse of authority been frequent and aggravated? How have they been visited?

Captain Rathborne, Collector of Hyderabad.

19. The character of the Native Agency employed under me, though far from good according to European standard, is good I think as taken by the Indian standard.

It is entirely with one exception composed of natives of the country.

Cases of malversation, peculation and abuse of authority have no doubt been frequent, if all had been brought to light; but they have not frequently been of so aggravated a nature as to be brought to my knowledge. When they have been, in esser cases the offender has been dismissed; in more aggravated, punished with fine and imprisonment with hard labour.

Major Goldney, Collector of Shikarpur.

19. The native employees are extremely shrewd and quick, good accountants and well acquainted with business. The great majority are natives of the country; a few Hindustani Kardars and Moonshis are in the Kardarate—peculation is very rife; and I fear that no effectual check can be found, seeing that we have no data, save our measurements, every harvest, by which to ascertain the revenue due to Government. It will always be worth a farmer's while to bribe a surveyor to short measure his farm, or an assessor to short batay his grain.

Bribery and peculation have been proved before Military Commission against various Moonshis, Kardars, and others, and have been visited by fines and imprisonment with labour.

Captain Preedy, Collector of Karachi.

19. Of the 18 Kardars, and 32 Moonshees employed in my districts, there are but few whose integrity can be much relied on; they are all, with three exceptions, natives of the country; most of them are old revenue servants of the Ameers. Twelve Kardars have in the course of four years been convicted either of malversation, peculation or abuse of authority, and most of them have been punished with fine and imprisonment, by the sentence of Military Commissions.

Query No. 20.—Are there any authentic records of the revenue of former periods and how far back do they extend? What results do they show as compared with those under British Government?

Captain Rathborne, Collector of Hyderabad.

20. There are authentic revenue records as far back, some of them, as Mir Fateh Ali's time. Little leisure has existed for so careful an examination of them all as might be advisable, but the result of such examination as has been made would give a considerably a larger grain, and a something, though much less, larger money revenue than is raised at present. It is however difficult to arrive at true results from mere accounts; for of the grain, the mixture of dirt and chaff swelled the amount much beyond its true sum; and of the money the grain sold for, much was never realized, the prices being fictitious: purchasers accepted orders in favour of Baluch servants at long dates in liquidation, which they discounted at half-price and when an order was given by the Ameers, for grain, seldom more than two-thirds even of the dirt adulterated grain was given for it. This it is that makes actual results difficult to tell. Still I should say, making all allowances, the Ameers Government received more than the British does. Though not more in proportion, considering the number of items, and some very large ones, of revenue which have under the British Government been abolished or considerably reduced and taking into consideration our run of bad seasons.

Major Goldney, Collector of Shikarpur.

20. The districts of Upper Sind having been held some by Khairpur and others by Hyderabad Mirs, the records here are very imperfect. The Khairpur Record office was inspected by Captain Pope, the first Collector in Upper Sind, and found to be in hopeless confusion.

Some imperfect data I have, the results of which will be found in the annexed.

Estimated revenue of the Shikarpur Collectorate during the Reign of ex-Ameers from such data (imperfect) as is available.

Estimated revenue of the Shikarpur Collectorate during the

Name of present Deputy collectorate.	Name of Purgunnah	Year supplied by the existing accounts.	Collections in		
			Grain.	Converted into cash at per Kurwali Rs. 25 country currency.	Cash rents of all other cases in country currency.
			Kurwah	Rs. a. p.	Rs. a. p.
Chandooka Larkana.	Myle Morade, &c. ...	Kharif 1,252 Rabi 1,253 ...	1,2573	3,14,450 0 0	18,437 6 7
	S a, &c. ...	,, 1,250 ,, 1,251 ...	359	8,875 0 0	1,33,397 6 0
	Kumber, &c. ...	,, 1,252 ,, 1,253 ...	...	...	...
	Bukirpur, &c. ...	,, ,, ,, ,, 1,254 ...	1,680	42,000 0 0	90,179 0 0
	For the district ...	Custom duties	.		
		...	...	...	...
Mehar,	Tigr, &c.	Kharif 1,251 Rabi 1,252 ...	727	18,175 0 0	12,916 11 3
	Mehar, &c. ...	,, ,, ,, ,, ...	3,543	88,575 0 0	11,776 13 6
	Baghban, &c. ...	,, ,, ,, ,, ...	3,127	79,300 0 0	21,590 5 0
	For the district ...	Custom duties	...	...	...
		...	...	...	...

reign of ex-Amirs from such data (imperfect) as is available.

Total amount of value of grain and cash rents in country currency.	Total amount of Deputy collectorate In country currency.	Converted into company's Rs.	Remarks.
Rs. a. p.	Rs. a. p.	Rs. a. p.	
3,32,887 6 7	...	..	Belonged to Meer Nusseer Khan of Hyderabad. The year 1252/53, has been taken, with the except n of one or two villages.
1,42,272 6 10	.	...	Belonged to Meer Mahomed Khan of Hyderabad for two tappas the year 1249/50, have necessarily been taken.
1,31,053 0 0	...	...	Belonged to Meer Sobdar of Hyderabad. The documents of this Purgunnah not existing in the office. The particulars of value have been gleaned from a man named Hukumatrai a resident of the locality.
1,32,179 0 0	...	...	Belonged to Meers Saydad and Hussain Ali of Hyderabad. Documents of half the Purgunnah exist. The other half has been estimated therefore with an addition of Rs. 25,000 to cover proper estimate.
36,612 0 0	7,14,503 13 5*	...	
...	..	6,89,459 0 0	
41,091 11 3	...	...	Belonged to Meers Saydad and Hussain Ali of Hyderabad. Remarks as above.
1,00,351 15 6	...	...	Belonged to Mir Mahomed of Hyderabad.
1,00,890 5 0	...	...	Belonged to Mir Sobdar of Hyderabad.
7,000 0 0	2,49,333 13 9*	...	
...	...	2,40,594 5 0	

* Govindah Rs. 3-8-1 discount.

Name of present Deputy collectorate.	Name of Purgunnah.	Year supplied by the existing accounts.	Collections in		
			Grain.	Converted into cash at per Kurwah Rs. 25 country currency.	Cash rents of all other cases in country currency.
			Kurwah	Rs. a. p.	Rs. a. p.
Sukkur.	Rohri, &c. ..	Kharif 1,253 Rabi 1,253 ...	...	...	..
	Sukkur, &c. ...	Estimated	...	...	...
	Gosurji	Kharif 1,247 Rabi 1,248 ...	75	1,875 0 0	6,962 7 9
	Ghotki, &c. ...	Estimatad	3,500	87,500 0 0	30,000 0 0
	Total ..	...	...	...	...
Shikarpur.	Shikarpur, &c. ...	Several years	550	13,750 0 0	1,23,782 4 9
	Naushahra ...	Kharif 1,251 Rabi 1,252 ..	1,624	40,600 0 0	15,343 10 8
	For the district ..	Custom duties	...	...	...
	Total ...	..	...	...	...
	Kashmore ...	Estimated	80	2,000 0 0	1,000 0 0
	Total Company's Rs.	...	...	...	...

Total amount of value of grain and cash rents in country currency.	Total amount of Deputy collectorate in country currency.	Converted into Company's Rs.	Remarks.
Rs. a. p.	Rs. a. p.	Rs. a. p.	
53,702 7 3*	...	...	Belonged to Meers Rustom and Nassir Khan of Khyrpoor. Papers not in office. Particulars from Kardar.
15,000 0 0*	...	...	Belonged to Meer Nassir Khan of Khyrpoor. Estimated from want of official documents.
8,037 7 0†	...	...	Belonged to Meer Nassar Khan of Hyderabad Late documents not procurable, therefore 1247/48 taken.
1,17,500 0 0*	1,94,239 15 0	...	Belonged to Meer Nassar Khan of Khyrpoor and others. Estimated from want of official documents.
...	...	1,80,740 13 1	
1,37,532 4 9	...	...	Belonged to Meer Nassir Khan and two more at Hyderabad and Nussar Khan to Meers at Khairpur from the deficiency of documents several years have necessarily been taken.
55,943 10 7	...	...	Belonged to Nassir Khan of Hyderabad.
64,000 0 0	2,57,475 15 4†	...	
...	...	2,43,074 0 4	
3,000 0 0	3,000 0 0‡	2,893 12 6	
...	...	13,56,761 14 11	

* Khyrpur Rs. 9-7-2 discount.

† Shikarpur Rs. 5-9-6 discount.

‡ Uokeshaye Rs. 3-8-11 discount.

(Sd.) PHILIP GOLDNEY, Major,
Collector and Magistrate.

Captain Preedy, Collector of Karachi.

20. In the Hyderabad Duftar office authentic records of the Revenue for former periods will be found, for at least 50 years back. These records are all under charge of the Collector of Hyderabad, and I am not aware what results do they show, as compared with those under us. The land revenue of my Collectorate for the official year 1846-47, considerably exceeded that realized by the Ameers in 1841-42, but as I have been unable to obtain a complete copy of the Ameers' Accounts for either of those years, I cannot state positively to what extent,

Query No. 21.—What were the general principles established and the forms observed in the revenue system of the former Government and the settlement made in more or less detail than under us? Was the revenue ever farmed on a large scale, and if so, how were the details managed under that system? What security was there for the interests of the cultivators? What check against oppression? What were the limits of the demands of the Government officers? Were they fixed by ancient usage and accounts or discretionary?

Captain Rathborne, Collector of Hyderabad.

21. The general principles established and the forms observed in the revenue system of the Ex-Ameers' Government were the same as with us in appearance, though in reality different. Their principle was to get as much money as they could out of the people; ours is to make the people as contented as we can, consistently with levying revenue at all.

The Revenue settlement was in its principle features the same; only it has been now enormously simplified by the abolition of a host of petty exactions. Then again the abolition of the whole of the town and transit duties effected an entire revolution, by relieving the country of a host of petty despots.

The revenue was generally farmed under the Ameers' Government. In that case the farmers made an advance on account of the Ameers, and received an order to take full

possession of the Purgunnah and did so; supplanting for the time being, the whole of the regular officers of Government, whose places they supplied with their own men. There was very little security in such cases for the cultivator and scarcely any check against oppression. Though if the farmer had taken the Purgunnah for two or three years, his own interest acted as a check against his carrying things so far as to injure the cultivation for next season. But where he had the farm only for one year, there was no restraint of this kind; and some revenue farmers doubtless abused their position greatly—Zamindars however, when too hard pressed, often themselves came forward and made a higher bid than the farmer for the Purgunnah, or got some one else to do so, in order to be freed—and no matter at what stage, a higher bid always secured the removal of the previously accepted bidder and his replacement by the man who offered more.

The limits of the demands of the Government officers were fixed by the 'Rucub' or Purgunnah rent rate furnished to every Purgunnah at the battai season and drawn out according to ancient usage and accounts, as they are now by Sir Charles Napier's Revenue rules; but a host of unauthorised exactions were levied under the general name of 'Batai cullum.'

Major Goldney, Collector of Shikarpur.

21. The general system of revenue under the Meers was arbitrary, the forms of management were the same as those now adopted from them, *viz.*, by Kardars, storekeepers and treasurers and accountants for each division; districts and divisions exist as the Meers left them for the most part and they are no doubt of very ancient date—perhaps older than the Mussalman rule in Sind.

The settlement of each division or even of each large village or dependency differed and was strictly defined; at least I find in the old accounts continual references to the rates as established by ancient usage; and these seem to have been recognized at any rate, as a basis at least, by both rulers and ruled. In some points they were sufficiently fair, although very high, and what we should consider extortionately so.

I believe an essay on the old Revenue system would be out of place here—briefly then, the prominent features of that system seem to have been a desire to extract the highest rent from the land consistent with the capabilities of the land.

Corn rents.—First is "Batay" assessment—this was fixed at 2/5 to 1/2 for ordinary tenants—but as it consists in simply taking for Government 2/5 or 1/2 of the actual produce it follows that Government took their chance equally with the cultivator of the out-turn of the crop—whatever he had to pay was on the ground for him to pay with, and was more or less according to the produce even as the tithe is when taken by the clergyman in kind, among ourselves.

Again in Kasagee—so called from "casa" a measure averaging some 27 lbs. weight of grain being the 60th part of a Kurwar, which may be considered as a fixed corn cess per acre, though fixed as high as 10½ to 12 and even more for rice—kasas per acre on good crops there was a proviso by which the tenant was entitled to a certain remission for a bad ones; thus say, 10 acres of land at 10½ Kasas 105 Kasas rent, supposing the whole 10 acres to be a fair crop; but if the tenant claimed a remission on the score of part of his fields having failed an "Ameen" or "Supervisor" of "Nuzur deed" Inspection—the word speaks for itself—was appointed to estimate the crop: we will suppose that he declared two acres to have totally failed out of the ten: then the rent would be levied thus—

Original rent on 10 acres deduct at 10½	...	105 Kasas.
Remission on 2—deduct at 10½	...	21 Kasas.
Balance levied by Government	...	84 Kasas.

On the other hand where land was not farmed out by the Meer to contractors, there was a power, assumed or allowed, of cancelling so much of the decrees of the 'Ameen' of Nuzur-

deed as seemed good in the eyes of the Government officers—probably in the case just stated the cultivator would have been allowed 1½ instead of 2 Beeghas remission, a trifle on 10 beeghas, but when carried out on 100,000 a matter of some consequence to the Government the reduction of 1½ instead of 2 Beeghas being equal on 10 acres to exactly 5 per cent. or on 100,000 acres to 900 Kurwars of corn—on a average valued at 25,000 Company's Rupees.

On cash rents, the assessments were very high, but the same privilege of claiming remission was granted—subject to the same revision by the ruling party. But to quit cash rents and shortly to resume corn collections the " Batayd " corn was disposed of to the highest bidder, and where bidders were low and slow in their biddings, the contents of the Government granaries were forced upon, the neighbouring men of capital so many Kurwars to each at a price Rs. 2 or more above the highest market price that could be extorted.

This has actually occurred in the knowledge of Lieut., and Deputy Collector Farington in one of the districts formerly under his charge ceded to Meer Ali Moorad in 1845—the process has the name of its own. It is called " Pawa "

There was another mode of converting the Government grain of the Ameers into cash, this was the ' Ruckŭb Era' peculiar to " Chandooka " on the Larkana district for Kassagee grain only.

By this the tenant was bound and entitled both to commute his fixed corn rent the amount of which had been ascertained a harvest by the combined process of measuring the land under crop and allowance for " Nuzzerdeed " at a rate in cash calculated by taking the prices current of certain large towns and grain marts on an average for the six months following the harvest. In Naushera formerly in Chandooka, but for the convenience of management now attached to Shikarpur, being close to it, I took this average for 1845-46 on Jowary at 30-9-6 per Kurwar at which rate without a murmur I still realized any petty arrears or attempts at evasion of arrears that I from time to time discover, though Jowary is currently quoted now at Rs. 18 the Kurwar.

There is the wisdom and equity evinced in the "Nuzurdeed" and Ruckub Era of Chandooka that, coupled with the name of the districts, seems to be surely derived from the Hindoo rulers of Sind though, I fear that I have not made the system so clear as I could wish—it being not easy to explain in writing many matters with which the writer is familiar in practice—Sir Charles Napier informed me that the system of a fixed corn rent without Nuzurdeed however commutable at a rate struck on the average prices of corn for a given period has for years been rife in some parts of Scotland.

But in many districts much was left in the hands of officials, to reduce or enhance rents—some farmers were encouraged—others threatened—many had promises of remission at the time of sowing by the Native Settlement Officer which were disregarded at the time of harvest by the officer appointed to realize the revenue.

The revenue was very generally farmed out to contractors but these farms are of themselves vary percarious—it was uncertain whether a man would retain them a few days only or for a whole season—if another bidder came forward, after the contract had been sgned and sealed some weeks, with a higher offer the orignal bargain was cancelled, the ousted party receiving a silk turban valued at 50 rupees as compensation—this occurred in "Chuck" in 1845 under Meer Ally Moorad.

If the contractor and his cultivators entered into any special compacts, any breach was referred to the Meer: I learn that about 16-17 per cent. of the Chandooka contract fell in arrears annually which arrears were for the most part never collected.

The contract system was not unfavourable to the district so much from oppression by the contractor who if on the one hand be squeezed, did on the other aid and support and encourage his cultivators as from the oppression of the contractor himself by the Government.

Contracts were sold to the highest bidder—drafts were drawn on contractors for payment of troops, retainers, bankers,

and others. In 1845, Meer Ally Moorad asssigned " Chuk " and " Roostum " adjoining my districts in part payment of his commissariat for the Hill Campaign, although already given in farm—accounts were settled at the close of the harvest with the Government by the Contractor. If a defaulter, there were ways and means of making him pay up through his connections he being always a man of some mark and usually a rich Hindoo : a peculiarly sensitive nation, and if pressed on points connected with religion easily coerced as individuals, though in a body most obstinate.

The interests of the contractor were the best security for the cultivator the flight of a latter into a rival district would have been a serious loss to the former, and this was the best and the only check against oppression by the Government which was always needy and therefore always weak. For the rates of rent and other demands by the Government officers, see the annexed tabular statement—I have above mentioned that these rates were fixed by ancient usage or at least by the accounts of former years.

Tabular statement, showing the assessment on cotton, sugarcane lands, &c., in the Upper Sind under the Meers.

Name of districts.	Cotton now 1/8.				Sugarcane now 2/8.				Tobacco now 2/8.				Wheat now 2/8.				Remarks
	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.	
Shikarpur ...	4	10	to 1	2	8	8	to 4	0	7	10	to 3	10	5	8	to 3	10	These rates vary in each Tuppa, fees generally heavy.
Larkana ...	2	13	to 1	6	8	0	to 4	0	5	0	to 3	0	8	13	to 5	11	
Sukkur ...	3	11	to 2	4	8	3	to 7	12	5	7	to 5	1	5	9	to 4	9	
Mehar ...	2	8	to 1	12	5	0	to 3	12	4	0	...		...		...		

Buttai collections in kind, were as under.					Fixed rent in kind—wheat.		
Shikarpur ...	½ ...	⅛ ...	¼ ...	of produce besides fees.	Shikarpur ...	6½ ...	Kassas per Beegah.
Larkana ...	½ ...	...	... ..		Larkana ...	10½ ...	Do. do.
Sukkur ...	⅓ ...	¼ ...	.. ...		Sukkur ...		
Mehar ...	½ ...	⅖ ...	... ...		Mehar ...	8 to 10 ...	Do. do.

PHILIPS GOLDNEY, Major,
Collector and Magistrate.

Captain Preedy, Collector of Karachi.

21. Under the former Government, the Revenue system differed little from that which now prevails. The land rent was for the most part paid in kind, and was collected either on the Butai, Kasgee or Danbundee system. The rates of assessment varied in almost every Purgunnah, the average amount paid to Government, being 2/5ths or 1/2 of the produce, together with numerous petty and vexatious fees and 'dustoorees', which considerably reduce the cultivator's share. The cash assessments also varied not only in every Purgunnah but on every description of produce, as also on the extent of land cultivated, while the fees and dustoorees were almost as numerous and vexatious as those levied on the rent paid in kind. All these fees and dustoorees have now been abolished, and the settlement although made in as much detail, is neither so burdensome nor so complicated as it formerly was. The farming system on a large scale was of late years frequently resorted to under the former Government. It was carried out as follows: The farmer of the revenue agreed with one of the Ameers to pay him a certain sum of money or so many Kurwars of grain at each harvest for the farm of a certain Purgunnah. On the agreement being concluded, the Ameer granted a Purwannah on his Kardar directing the latter to make over the Purgunnah to the farmer who forthwith set to work to make the most of his bargain. This he effected by various means. The principal zamindars he encouraged to bring waste land under cultivation, by promises of reduction in the rate of assessment, and of considerable presents. The poorer classes he intimidated by threats, and being entrusted with the sole administration of justice, he was enabled to raise a considerable revenue by infliction of fines which he levied with an unsparing hand from all those who were unable to resist his authority. The cultivators interests were so far secured that the former could justly levy only the Government share of the produce according to the former custom of the Purgunnah—still, as the Government Kardar was withdrawn, the farmer had it in his power to commit and no doubt generally did commit a great deal of oppression and injustice. The land revenues and customs of some Purgunnahs have occasionally been farmed under our Government, but the Kardars and their establishments were never withdrawn. The farmers were allowed to collect taxes, and the Government share of the

produce only according to former custom. Complaints of undue exaction were however frequent and the system was on the whole found to be very objectionable and was therefore abolished by order of His Excellency the Governor. The demands of the Government officers under the former rule were limited by ancient usage and accounts.

Query No. 22.—Were there and are there now any privileged classes who are allowed to hold lands on more favourable terms than ordinary cultivators ?

Captain Rathborne, Collector of Hyderabad.

22. There were the Jagheerdars who held land rent free. A few Syeds, Peers and zamindars who had small garden grants or grants of plots about their villages and also some who were allowed a few wheels at a reduced rent—there were others who cultivated largely on a different plan from the ordinary one paying a fixed rent annually. This system is called Kasghee, it was to a certain extent a privilege and it still continues.

The advantages of the Kasghee system to Government are fixity in amount and regularity of payment; the disadvantage that as the rent is fixed at so much a wheel instead of so much for a fixed extent of land the Kasghee tenant can double or treble the land under cultivation, by adding bullocks to his establishment and drawing water constantly day and night, without having to pay a single penny additional rent. The wheel when the system was introduced was estimated to water 15 beeghas and on that amount the rent was calculated; but by adding bullocks some manage to cultivate 40 beeghas, and only pay the same amount, as those who cultivate 15 only. This will have eventually to be looked to, and some limit fixed to the extent of a wheel, when the rent is estimated in this way. With the exception of a check, which will eventually as imposed wheels come into use, be required in this respect, I think the system is a very good one, both for the Government and the cultivator.

Major Goldney, Collector of Shikarpur.

22. Not as a class was there any privileged body sitting at reduced rents, but sundry persons held leases (Puttas) allowing them to cultivate at 1/4 Batay or 1/3 instead of 2/5

these have been respected where less than 1/3 but, by the new revenue Regulations no remission of rent is made and all classes pay alike, except where in the enjoyment of grants at lower rates than those fixed by those regulations.

Captain Preedy, Collector of Karachi.

22. A few Zamindars in Sehwistan are allowed to hold lands on more favourable terms than ordinary cultivators, agreeably to sanads granted to them by the Ameers.

They obtained these grants as matters of favour, on their promising to bring large tracts of waste land under cultivation, and they have in most instances fulfilled their engagements.

Query No. 23.—What of the ancient revenue arrangements remain in full force and what have been fixed under us? What have been the advantages and disadvantages of any changes that have been introduced?

Captain Rathborne, Collector of Hyderabad.

23. The main features of the ancient revenue arrangements have been preserved, what were considered its chief incumbrances and imperfections have been removed. Thus the revenue officers, the territorial divisions, the partition of the grain, the levying cash rent by measurement on certain kinds of produce—these have all been preserved while the duties of those officers have been limited and defined—all the arbitrary exactions put an end to—the shares of grain fixed with more certainty, and fees and extra cesses abolished—the numerous 'ibwabs' or cash rents put an end to and thus fraud either by the Government servants or the cultivator made more difficult—and any oppression impossible. Cash rents too for all produce have been put on the same footing—and thus the impediment which the high taxation offered to the cultivation of the more valuable kinds has been removed.

The advantages of the changes that have been introduced are simplicity in accounts—more independence to the cultivator—a more perfect definition both of his rights and those of the Government—a lowering of the assessment to a less oppressive rate—and the removal of the more obnoxious points of the old

system—including the vast number of fees and perquisites defined and undefined which under the old system were taken by the officers of Government, and which the Ryots dared not, had they wished, withheld.

Major Goldney, Collector of Shikarpur.

23. The rights of individuals have been maintained as before to their zamindaree or quit rent in other respects all matters connected with land revenue have been simplified. The ancient forms of 'Batay' and of land measurement have been retained, establishing one uniform standard acre; the old statute labour on canals has been retained and I think advantageously, seeing that it is more to the advantage of the people to be obliged to work than to be obliged to pay others. No alteration has been made in any of the interior economy of the country, and the feelings and habits of the people have been in no wise interfered with, except that their rents have been reduced. If any disadvantage has resulted, it is injury to the revenue from the great difference between former and present rents.

In fisheries and garden rents, the old system is retained; in Customs the Bombay Tariff for exports and imports has superceded the old duties, transit duties are abolished and Poll tax also, the contract system for customs and land revenue.

On these last I am not at all persuaded that the condition of the peasant is improved by being brought into immediate contact with Government. Theoretically it is; but it will require many years ere the great mass of cultivators acquire sufficient property to keep out of the hands of capitalists: and until they do, they must be as ill or worse off now than where a third party intervened, whose constant business and interest it was to offer that accommodation which it is impossible for Government to allow, and which would be improper were it possible.

We see the anxiety of poor farmer to shelter himself under the capitalist by the fact that though the lands are more lightly assessed now, he still relinquished half his produce as

before to get his rent paid and his advances made—so that any grain from the lessened demands of Government accrues to the Banker and not to the farmer.

But I am quite aware how extremely illiberal and antidiluvian my notions are considered by advocates of the Ryotwary system, a mode of proceeding which, applied to anything but farming, would be considered preposterous by which mines, manufactures, rails, canals, ships, colonies and commerce would become impossible: which presupposes a virtue in the people, a moderation in the Government, an uniform favourableness in the seasons which all experience is opposed to: in Sind the zamindari system prevails modified by the prescriptive rights of the peasantry and I think it will continue from the force of circumstances and the poverty of the people: which prevent the mass from profiting by the liberality of the Revenue Regulations.

Captain Preedy, Collector of Karachi.

23. While the mode of collection remains unchanged, the rates of assessment have been considerably modified. Those lands which were formerly assessed at half and 2/5ths of the produce with numerous extra fees and dustoorees are now assessed at 1/3 with the extra fees if 4 cassas of grain as "Khurrutch" or expense of collection, and 3 cassas as "Hakkaba" or water tax per Kurwah on the gross produce. Lands formerly assessed at 1/3 with extra fees are now assessed at 1/4 with "Khurrutcha" and "Hakkaba". Cash rents which formerly varied not only in amount, but on each description of produce, and on the extent of land cultivated in each Purgunnah, are now equalized. Rs. 2-8-0 being charged on the Napier Beegha in Upper Sind, and Rs 1-6-0 per Beegha in Lower Sind, while in lieu of the numerous extra demands, a fee of 6 per cent. on the amount collected has been substituted. The system of farming the land revenue, with its numerous evils, has been abolished, together with all the oppressive taxes and transit duties in every town: the latter were formerly collected in every village and by every petty chief but now customs are collected instead, according to the Bombay Regulations on the Frontiers only. Under the former Government

the rich paid customs at much lower rates than the poor. Now all pay alike. Formerly the Zamindars and Ryots were compelled to provide the Government servants, Kardars, Buttaidars, Zabits, Munshees and their long train of attendants with provisions or forage during the in-gathering of the harvests, or for about six months in the year, besides paying them fees, whereas under the new system they are relieved from these exactions, and each man knows how much rent, whether in cash or in kind he has to pay to Government, and can at all times obtain redress, if more is taken from him. The advantages which the present system possesses over that which formerly prevailed, are therefore great and manifest, but still much remains to be done, before the mass of agricultural population, the unhappy Ryots, can be freed from the bondage under which they groan. So long as the zamindars cultivate their lands, we cannot of course dispossess them, but I have given strict orders to the Kardars of my disticts, to resume on account of Government, all lands which are lying waste, and to make them over in Ryotee to anyone who will undertake their cultivation, making at the same time small advances to the extent of 40 or 50 rupees to each cultivator for the purchase of bullocks, &c. I have also informed the Ryots that they can at all times obtain a settlement of their accounts with the zamindars, by an application to the Deputy Collectors or to myself.

Query No. 24.—Were the powers and duties of the native district officers different and, if so, more or less extensive under the former Government than under us? How were they paid? On the whole is there more or less efficiency in the system of Revenue management under the former Government, or under us? Is there more or less formality, decision and despatch? Are we more or less arbitrary, summary and discretional?

Captain Rathborne, Collector of Hyderabad.

24 The duties of the native district officers were to certain extent only the same as now.

Their revenue was their chief object—while now a principal

one is helping to put down crime—which in those days it was their interest to encourage, as a great portion of their pay consisted on the fourth of property stolen and recovered.

Their powers too are now wholly different. In the Meers' times they had no power whatever over the Baluchees of the district; but over the cultivators and others, their power was absolute. Now their power over all is limited, but it extends as fully over the formerly privileged class as over any other.

As regards efficiency of system there can be no comparison between the two systems; but I think as regards the individuals working under the two systems, the Ameers had at their command the services of much more efficient men than we have had, till within a short period. The Jagheerdars under the Meers' Government were all, except the very highest, obliged to undertake whatever duties were assigned them, and filled all the kardarships; but under the British rule, few have taken service, partly owing to their fear of our strictness and partly owing to their being so many of them now provided for without the condition of service attached. Of late however a total change of feelings has come over them—and all nearly seem now as anxious for employment as they were formerly averse to it.

The powers of collections in regard to Revenue arrangements within their respective collectorates has hitherto been so great that in point of despatch, we have possessed as much facility as the servants of the most despotic Government but rules have of course had to be observed more exactly than in the Meers' times, much less discretion has been left in the hands of Purgunnah officers—and the strictness with which bribery and other offences of that kind have been visited, when discovered in Purgunnah officers—combined with the fact that few or none (whatever they may now be) have always since they were appointed, kept their hands pure—and has thrown most of the Kardars much more under the power of the cultivators than it is desirable they should be —as they mostly dare not act as strictly as they ought, the fear of revelations being made in retaliation which they are but too well aware have

ample foundation—matters in themselves trifling perhaps—but still sufficiently against the law to ensure a heavy punishment under the rigorous system that has been pursued towards the Amil class in Sind. This is perhaps the worst point—the great ulcer in our Revenue administration—but as running ulcers sometimes purge off worse ills in the human frame—so it is possible that what may have been lost in revenue through this means has been more than made up in peace and quietness and that had it been otherwise instead of the yielding which foregoes demands in strictness, we might have had much worse result in the arrogance and rapacity that leads to disorganization and revolt.

Major Goldney, Collector of Shikarpur.

24. The Head Kardars in the Meers' times had the fullest powers in revenue and magisterial matters in the latter even to capital punishment, seldom now ever inflicted, they had much more extensive powers in their districts than any Collector now.

Their pay was in cash actually less: but in perquisities vastly greater, they received daily provisions in kind, were entitled to so much grain in each harvest, their servants and horses were fed by the district—and they probably had assignment of grain or land for keeping up horsemen for Government service—who were their own family or their own followers.

As an engine for extracting Revenue, the old system was immeasureably superior to our own: it was less formal, more decided, rigorous and prompt.

We are less arbitrary, less summary and more deliberate.

Captain Preedy, Collector of Karachi.

24. The duties of the native district officers under the former Government were similar to what they are now, but their powers have been greatly circumscribed. They were formerly paid partly in money, partly in grain, but the sources whence they derived their chief emoluments, were the fines, bribes and fees, which they enabled under various pretences to levy or extort from the Ryots. Our system of revenue management is doubtless much more efficient, than that of the Ameers. Business is conducted with greater formality and with more decision and despatch, while we are less arbitrary, summary and less discretional.

SELECTION No. III.

REMARKS

ON THE STATE OF AFFAIRS AT KELAT

BY

Mr. (afterwards Sir) H. B. E. FRERE,

Commissioner in Sind.

Submitted to Government in February 1858.

L (IV) 355—19

No. 64 of 1858.

SECRET DEPARTMENT.

From

H. B. E. FRERE, Esquire,

Commissioner in Sind.

To

The Right Honourable

Lord ELPHINSTON, G.C.H.,

Governor and President in Council,

Bombay.

Dated 19th February 1858.

My Lord,

I have the honour to submit to your Lordship in Council the following remarks on the present state of affairs at Kelat.

2. The history of this state and of our connection with it are already very fully on record. But it is necessary that I should briefly allude to those past occurences which still materially affect our relations with the Khan and his people.

3. On the disastrous policy which marked the Earlier years of our connection with Kelat it is not necessary to dwell. In 1839 we stormed the Capital, killed Mehrabkhan, the Ruler, and some of his best and bravest Chiefs and appropriated all the public and private property that could be found. We set up a successor from a rival branch of his family and placed at his Court an officer as British Agent whose character and conduct, now matters of history, were little calculated to correct the fundamental errors of the policy which he was charged to carry out. A rebellion ensued; the British Political Agent was slain; the puppet Khan deposed; and we found ourselves compelled to acknowledge a son of Mehrabkhan as his successor to the Khanate, shorn meantime of some of its best Provinces which had been made over to our Ally Shah-Shuj-al-Moolk, the puppet king of Afghanistan, while Runjeetsing our other partner in the triple alliance, appropriated others.

Cutchee, &c.

Hurrund and Dajul.

4. Our treatment of the Belochees had not been of a character to inspire much respect or attachment. But mainly owing to the personal character of some of the officers in contact with them during the later years of our occupation and partly perhaps also to the feeling of the Belochees that we were less dangerous neighbours than the Afghans, the young Khan and his people showed a steady attachment to the British Government such as could hardly have been expected. They faithfully performed their share of a treaty to which they became parties with the British and Afghans in 1841, only a short time previous to our evacuation of Afghanistan.

5. From the date of that evacuation it was our avowed policy to wash our hands off all concern with independent States beyond the Indus, and our treaty with the Khan was declared by us to be at an end, for reasons which, however sound in a cabinet of Diplomatists were not by any means evident to the rude understanding of the Belochees.

6. For several years from 1842 to 1854, the young Khan struggling with the difficulties caused by reduced territory, diminished income, the sack of his capital, and the consequent general poverty of his court, continued unavailingly to proffer allegiance to and alliance with the British Government and to beg an acknowledgment of our obligations under the treaty which he continued religiously to observe.

7. Strong temptation was more than once held out to him to take part against us, when we had our hands full in Sind and the Punjab. But he continued, as far as he was able, faithfully to observe the duties of good neighbourhood, enforced, as he always considered them to be, by his obligations under the treaty, which we refused to acknowledge as binding on us.

8. I have always believed this line of conduct mainly due to the officer then in charge of the North-Western Frontier. General Jacob had been placed there in 1847, and while showing all men that he had the power to enforce respect for our own rights, he scrupulously respected the rights of our neighbours. He punished severely all our own subjects, who presuming on the power of our Government, were guilty of

aggression on the inhabitants of the distracted state beyond our border. He did the same justice to the Khan's subjects which he exacted for our own, and the character and influence which the British name has since acquired in Baluchistan, is, I believe, quite as much owing to respect for his justice, as to fear of the power which he has wielded with such invariable success in the field.

9. From the time of General Jacob's taking charge of the Frontier it ceased to be possible for the predatory border tribes to invade Sind with impunity. The country within our line of outposts settled down and began to improve with marvellous rapidity; and the good example spread far beyond our border. But it was necessary to maintain a strong and efficient frontier force and the more than semi-independent tribes continued to harrass their fellow subjects in the Kelat territory, while the Khan was too week and too poor effectually to coerce them.

10. In the month of February 1854 I had an interview with the Khan at Jacobabad, the results of which were at the time fully reported to Government. They were in the opinion of the Political Superintendent in every way beneficial by promoting a fuller and better under-standing between the Khan and his British neighbours by giving to each party a clearer view of the wants and wishes of the other and by showing the identity of interests which existed between them.

11. The Khan urged with great force the exposed condition of his own North-Western Frontier and his dread of Persian and Afghan invasion which his impoverished exchequer rendered him ill able to resist. He gave assurances that commerce should be protected and relieved from the irregular levy of black mail by petty chiefs along the road. He promised to exert himself to put a stop to private and inter tribal feuds, and effectually to restrain the inveterate plundering propensities of his nominal subjects, the Murrees.

12. The Khan learnt from the Political Superintendent the particulars of the attempts made by his treacherous Minister, Muhammad Hussan, to betray him as he had betrayed his father, and to usurp the Khanate.

13. From that time forward a marked improvement was visible in the Khan's attention to his own affairs and in the general management of his country. He selected as his principal adviser Moola Ahmed, an old and faithful hereditary servant of his family who had from the first been intimately connected with the officers of the British Government and was sincerely desirous to carry out the reforms which were so essential to the prosperity of his master's dominions. Moola Ahmed was very popular with all classes of the Khan's subjects.

14. In the succeeding April 1854 during my absence in Egypt Major Jacob, the Political Superintendent, was instructed by the Government of India to negotiate a treaty which was executed on the 14th May following. It declared perpetual friendship between the British Government and the Khan; bound the latter to oppose all enemies of the British Government; in all cases to act in subordinate co-operation with the Government; to enter into no negotiation with foreign States, without its consent; provided for stationing British troops any where in the Kelat territory, as might be thought advisable by the British authorities; bound the Khan to prevent plundering and to protect commerce within his dominions, to abstain from irregular exaction from traders; and on a faithful performance of these conditions, by the Khan, the British Government engaged to pay him 50,000 rupees annually.

15. But the mischievous results of so many evil years were not to be cured in a day. The management of the Khan's finances had fallen principally into the hands of one Gangaram, a Hindu, nominal Naib of Cutchee. With an aptitude for accounts and finance characteristic of his race, he had been long useful to his impoverished master, and had managed to get so prominent a share in the administration as gave great offence to the proud and jealous sirdars of the Khan, while he always evaded rendering any account of his administration. General Jacob pointed out to the Khan that it was essential to any financial reform His Highness might attempt, to settle accounts with this man, and by restricting him to his proper duties, to avoid giving offence to the chiefs on whose cordial co-operation His Highness must rely in all the measures essential to the improvement of his country.

16. The Khan attended to this advice and, up to the date of His Highness's death, a slowly progressive settlement of Gangaram's accounts was carried on, and he had ceased to hold any position which gave offence to the sirdars.

17. In 1856, the effects of the more liberal line of policy adopted towards the Khan began to show themselves. The Murrees no longer secretly encouraged by a traitorous Wazir, sought to make their peace with the Khan, who, they now saw was becoming able as well as willing to enforce their submission, and punish their habitual misbehaviour. The levy of black mail stopped, commerce revived, and there was a fair prospect of improvement in every branch of the Khan's affairs.

18. But the same year brought with it the Persian war, one of the causes of which was the occupation of Herat by the Persians, a movement which very directly and materially affected the Khan's interests. His South West Frontier was also menaced by the Persians, and their outposts threatened to advance towards his capital by more than one route.

19. An officer, Major H. Green trained on this border, and since distinguished in the Russian war, was deputed to Kelat in October 1856 to advise and assist the Khan, with whom he remained some weeks, long enough to acquire the confidence of the Khan and his principal sirdars and to obtain much useful information regarding the country, its wants and resources.

20. The Khan had been previously aided with money and arms. By the energy of General Jacob who was acting as Commissioner, and Major Merewether, Officiating Political Superintendent on the Frontier, these were conveyed to him in an incredibly short space of time and though no military operations of importance took place on the Persian Frontier, the arrangements made by the Khan and the effects they produced proved, beyond question, the weight of the influence which the Khan if supplied with money and arms and aided by European officers could exercise in any operations which might take place between the Persian and Indian Frontier.

21. This result is a strong proof of the soundness of the policy which was throughout advocated by General Jacob. He protested most energetically against any withdrawal of our force on this Frontier, and strongly urged that a British Force should be at once pushed on to Quetta and permanently maintained there, as the least expensive and most effectual move which could be adopted, to counteract any threatened advance from the neighbourhood of Herat.

22. The Persian war was however terminated much sooner than was expected. The objects for which it was undertaken were attained. But though Herat was evacuated, the partizans of Persia were ready with explanations to neutralize the effect which might otherwise have been expected from such a proof of our success. The Bengal Mutiny broke out immediately afterwards. There was a very current belief among the friends as well as the enemies of Persia that the flame of discontent had been fanned by Shia teachers, sympathising with, if not instigated by Persia, and there can be no doubt that the early success of the mutineers caused great rejoicings among all in this quarter, who were supposed to be in the Persian interests.

23. It is impossible to say what might have been the popular impression as to our success in Persia had the Indian mutiny not supervened. As it is, I do not find that the result of the war has raised our reputation in these parts to the extent I should have hoped.

24. The death of Nusseer Khan after a few days' illness in the flower of his age, on the 2nd of June 1857, just at the commencement of the mutiny followed shortly after by the paralysis and death (11th August) of his faithful minister Moola Ahmed, were two very serious misfortunes. A long residence at General Jacob's Headquarters as Agent for the Khan, had given Moola Ahmed the highest respect for and confidence in the Political Superintendent and in the Government whom he represented and it was impossible to find a successor so devoted to the Khan's true interests, and so convinced that they were dependent on the friendship, and support of the British Government.

25. On the Khan's unexpected demise, he was succeeded by his half brother Khodadad Khan, the son of a woman of inferior birth. If, as I have been assured, he was born after his father's death in 1839, he could have been only eighteen years of age when he succeeded to the Khanate, so completely had he been secluded in the zenana that his existence was not generally known, and he was reported, by those who were aware of his existence, to be half witted. The suddenness of Nusseer Khan's death perhaps prevented much deliberation, and rendered an immediate recognition of a successor, the only alternative to anarchy and civil war. Be that as it may, Khodadad Khan was at once universally acknowledged as the lawful successor to his half brother and the chiefs generally repaired to Kelat to tender their submission.

26. Meantime events had occurred within our own Frontier which exercised a considerable influence on affairs in Kelat. The Bengal mutiny had raised the hopes of every disaffected person in India, and even those who would otherwise have never dreamt of disloyalty began to speculate on what was to be done, should the British power not be re-established. In place of one of the regiments of Sind Horse, taken away for service in Persia, a Regiment of Bengal Irregular Cavalry (the 6th) had been moved down from the Punjab. It contained, according to general report, at least the usual proportion of disloyal and disaffected men, and I feel assured from what I have learnt of their proceedings, they were only deterred from open insurrection by the knowledge that the other Regiment of Sind Horse, who remained on the Frontier, could not be induced to join them, and would crush any attempt at mutiny. At Shikarpur, a conspiracy was discovered headed by one of the leading native officers of the Native Infantry Regiment (the 16th) and some of the Native Artillery attempted to break out into open revolt, while news came of similiar attempts at Hyderabad and Karachi, suppressed only by the steadiness of the other Native Regiments and Police. At the same time a general insurrection broke out among the Beloch tribes between Lahore and Mooltan with whom there is reason to believe the disaffected in Upper Sind were in communication.

27. It is unnecessary to dwell on the effects of such a general shock to our reputation, as the mutiny embracing all the North-Western Provinces and Bengal, combined with presence of a regiment of questionable loyalty, belonging to the revolted army, and the actual outbreak of open mutiny, among some of our troops at Shikarpur. The Frontier population had for ages past known no state of existence but one of constantly recurring revolution and lawlessness. The ten years of peace and strong regular Government which they had enjoyed since General Jacob was in command on the Frontier, had not obliterated their recollections of days of anarchy and license, nor altered habits which it requires generations of good Government to correct. The consequence was a universal tremor and excitement among the half reclaimed Belochee tribes and though any overt act of rebellion was prevented by the courage and calm good sense of Major Merewether and Lieutenant Macanley, the slightest false step on their part would have roused the whole of a semi barbarous population, on both the sides of the border, to enjoy the excitement of emancipation however temporary, from the restraints of good Government.

28. Such disturbances did indeed actually occur at Kelat. Among the chiefs who attended under pretence of doing homage to the Khan was the Jam of Beyla, whose territories lie along the seacoast from Karachi westward. He was connected with the late Khan by marriage, and had always paid him a nominal and unwilling allegiance. He was known to entertain vague hopes of succession to the Khanate, and it was considered doubtful whether he went to Kelat really to tender his allegiance, or to discover what chance he possessed of realizing his ambitious hopes.

29. At Kelat, he joined other chiefs of influence, who appear to have thought the occasion propitious for pressing claims upon the Khan, some of which appear to have been reasonable and well founded, while others were the reverse; but they were urged in a manner which induced the Khan's advisers (September 10th) to resort to force, to dislodge the remonstrant chiefs from the garden near Kelat where they were encamped. They retired to a short distance from the capital and thence addressed petitions for redress to the

British authorities assembling at the same time their own followers with a view to enforce the Khan's attention to their claims.

30. Major Merewether lost no time in despatching Lieutenant Macanley to Kelat (September 16th) and I consider it is mainly owing to Lieutenant Macanley's judicious firmness and temper that the civil war was arrested and that the rebellious chiefs were for a time at all events, brought back to their allegiance.

31. His going to Kelat at all was strongly opposed by several influential parties about the Khan. For reasons not apparent at the time, they threw every obstacle in his way and endeavoured at first to deter him by exaggerating the risk which he undoubtedly ran, and then to shut him out from all free intercourse with the people of the country. But he calmly and steadily held on his course and the obstacles gave way as he approached. The insurgent chiefs then sent messengers to meet him and endeavoured to enlist his sympathies by a statement of their grievances. But he replied that his mission was to the Khan who would doubtless do justice and redress all grievances duly submitted to him at the proper time and place and pushed on to Kelat.

32. There can be little question but that delay or hesitation would have led to the destruction of the Khan, to a general scramble for power and all the evils consequent on such disorders. The presence of a British officer overawed the disaffected and turbulent and many of the chiefs who had substantial grounds for complaint, deferred seeking satisfaction by force, in the confident belief that, sooner or later, the arrival of a representative of the British Government would lead to the redress of all real grievances.

33. One general cause of complaint and dissatisfaction was the power usurped by the Hindoo Gangaram. He had ingratiated himself with the young Khan, whom he supplied with the means of indulgence, discouraged him from any attempt to learn the business of Government, and kept him aloof from all intercourse with his chiefs.

34. It must be borne in mind that Kelat is essentially a feudal State. As head of a powerful confederacy of nobles, bound to attend his summons to war, and able to bring a large number of clansmen and vassals into the field, the Khan, if energetic and popular, has the entire command of a large, hardy and warlike population, and his ability to assemble and keep them together is only limited by his means of supporting them, when kept more than a certain number of days away from their own homes.

35. His power otherwise is very limited. Every chief acts as if he were the independent ruler of his own tribe, and the greater part of the Khan's most valuable districts being divided out into fiefs among his principal chiefs, he has no means of keeping up a standing force such as could maintain his authority in opposition to the wishes of any large body of his nobles.

36. A Jewish Prime Minister could scarcely have been more obnoxious to the Barons of Robert the Bruce, than was the Hindoo Vazeer to the haughty, ignorant and bigotted chiefs of Baluchistan; and it was difficult to understand that even the love of money and power should have so far blinded the old man Gangaram to the danger he ran by occupying the position which the Khan's weakness allowed him to assume. The only explanation was that he looked for support from some other quarter.

37. He however soon showed that it was not to the English Government he looked. Lieutenant Macanley took an early opportunity of impressing on the young Khan that a ruler had other duties to perform than to enjoy himself and leave his people to be governed by others. He encouraged the Khan to attend to business, to look into his own affairs, and transact business personally with the chiefs who remained at Kelat, and the principal officers of State. The young Khan who was so utterly ignorant when he came to the throne that he could hardly read or write, had good abilities, and when he found that ignorance and sloth were considered unbecoming his position, he applied himself to learn

with deligence and success. But this was not what Gangaram desired, and after thwarting Lieutenant Macanley as far as he dared, he ventured one day, to taunt him in the Knan's presence, with the then disordered state of Hindoostan, and remarked that, "it would be better that we should reduce our own dominions to order before we went to teach other rulers how to govern."

38. Major Green resumed charge of his appointment from Lieutenant Macanley on the 1st December 1857. His previous residence at the Kelat. Court enabled him to confirm the truth of Lieutenant Macanley's observations, and he soon became convinced that unless the obnoxious Ministers were dismissed, real grievances redressed, and the country governed more in accordance with the wishes of the chiefs and people nothing would avert a civil war, of which neither the issue nor the terribly evil results of the attendant confusion, could be matter of doubt. It was clear that nothing but the presence of a British officer, and the hope that his influence would be sooner or later exerted for good, kept the irritated and aggrieved chiefs from open rebellion.

39. When I visited Jacobabad on the 16th December last, General Jacob laid these facts very fully before me, and proposed that, as the best chance of arranging matters between the Khan and his chiefs and averting disorder which could not but involve the whole Frontier and produce mischief of which it was impossible to foresee the extent, we should comply with a wish which the young Khan had expressed to Major Green, to see Jacobabad which would enable us to have a personal interview with him and his chiefs.

40. Convinced that your Lordship in Council would wish no means left untried by which any personal or official influence could be brought to aid in the preservation of peace in this quarter, I readily assented and we proceeded to Shahpur, in Cutchee where the Khan met us, on the 1st January last, attended by all his chiefs who were within reach. He returned with us to Jacobabad, and after a short stay there left on the 11th January 1858 and went back to his winter quarters at Gundava.

41. During the ten days we were together, we had many opportunities of judging of the Khan's character and position, and at the same time the advantage of learning very fully the results of Major Green's observations and enquiries, which were of the greatest value.

42. Gangaram made most pertinacious efforts to present himself and to be recognized and received as principal minister; but it was clearly explained to the Khan that though it rested entirely with His Highness to bring whom he liked and to employ whom he pleased as Minister, our desire was to see him as ruler of Kelat surrounded by his chiefs, and we had no wish to see any one whose presence would we know be utterly distasteful to them, and whose being placed in the position of Minister would be regarded by them all as an insult.

43. The Khan looks older than he is, and is not unpleasing, though hardly perhaps prepossessing in appearance. He is rather under the middle height, with the extremely marked features and very dark complexion of his race. He had as Major Green and Lieutenant Macanley assured me wonderfully improved in manner of late. He evidently possesses great natural quickness and a strong will. But it is very difficult to fix his attention to any one subject for any time, and in the midst of a serious discussion, he would be attracted by any novelty, or make some childish remarks which, though not perhaps silly, was by no means in accordance with the grave manner and strict decorum of Belochees and Brohees in all formal assemblies. Of his disposition it is more difficult to judge, and it would be looking for too much to expect from one whose education and training have been so neglected, the scrupulous regard for truth and high feeling which could be desired in one in His Highness' position. Perhaps the most that can be said is that his character presents the materials for a good ruler. How they will be ultimately moulded time alone can show. Major Green has evidently acquired great influence over him, and he had become much attached to Lieutenant Macanley, and it is a good sign that the Khan seems eager to conform himself, in externals at all events, to the model of a sensible, sound-hearted, manly British Officer.

44. There was something very affecting in the anxiety shown by the chiefs and all the old adherents of the Khan that Major Green should persevere in the difficult task he had undertaken, and not leave the Khan to his own devices, and to the evil counsellors who beset him. Old men of all classes and parties would entreat him not to abandon the child. The most remarkable instance was that of the aged Darogha Gul Mohomed, a name well known in the disastrous days of our early connection with Kelat. His savage and rugged fidelity to his master had been long rewarded by the custody of the citadel, and the care of the Khan's family. He used formerly to avoid meeting Englishmen, more than he could help, saying that the sight of the race whose countrymen killed his master "made blood come out at his eyes." But he sought an interview with Lieutenant Macanley, expressed his pleasure to see him at Kelat, and after his rude fashion commended his young Sovereign to the Englishmen's good offices.

45. We had the usual formal interviews at which all the chiefs attended (for the first time I believe since the Khan's accession) in the customary form. They were headed by two great chiefs Moola Mohomed Risanee, Chief of Sarawan, sitting with his followers on the Khan's right and Taj Mohomed Lehree, Chief of Jallawan, on his left. It is worthy of note that these two men had been the foremost in the late rebellion.

46. I afterwards saw the Khan several times in a more private manner, with none but his personal attendants, and also in company with the few principal chiefs, ten or a dozen in number, who are held by hereditary right to have a voice in every council of importance.

47. As regards the appointment of a competent and responsible minister, which was of course only discussed when the Khan was alone, he showed more pertinacity than I had expected. He argued in favour of Gangaram with great fluency and adroitness, and when unable to answer the question whether any single chief of any influence would tolerate the man's presence, or take orders from him as Wazir, he said "he would be his own Wazir, and look after everything himself." The extreme childishness of his character, and his utter want

of experience or knowledge of business, would under other circumstances, have made this proposition simply ridiculous. At last finding that we considered the matter as one of paramount importance, though we abstained from recommending any one in preference to his notice, he said he would nominate Wulli Mohomed Shaghassee and on being informed that we considered the appointment un-objectionable, he introduced him to us as Vazir and since his return to Gandava, had formally installed him in full Durbar.

48. It is apparently the best choice he could make. The Shaghassee is a man in the prime of life, active and intelligent, prepossessing in manner, and popular with the Brohees. He commanded the late Khan's troops on the Persian Frontier, during the late war, and acquitted himself creditably. As far as I could learn his nomination gave general satisfaction.

49. It was a more difficult matter to make up the differences between the Khan and his lately rebellious chiefs. Their deportment was at first extremely sullen. The appointment of a Vazir removed one great cause of discontent and, in alluding to recent occurrences, they said that if the Khan behaved well to them they would be faithful and loyal to him. Little allusion was made to specific causes of discontent except the Khan's refusal to release Mohomed Ameen who was the brother of the late traitorous Vazir Mohomed Hassan and had been imprisoned by the late Khan for an attempt at open rebellion. But Major Green was aware that every one of the chiefs had some personal grievance, and few or none would have the self denial to delay bringing it forward, whenever he thought that the Khan's weakness afforded a good opportunity.

50. There was of course no discussion of such claims at our interviews, and before the chiefs left, manifestly good effect was produced by General Jacob addressing them in the Khan's presence, reminding them how he had laboured for the good of the late Khan, and his people, and the claim he had thereby established to advise and exhort them. He pointed out the want of patriotism and self denial evinced by pressing individual claims on the Khan, at a time like this, and earnestly exhorted

them that, if they wished to see their country flourishing and their Sovereign respected, to lay aside their petty jealousies and differences and to co-operate heartily for the general good.

51. They were evidently touched and pleased with the heartiness and manliness of the address, professed a sincere wish to be guided by the advice so frankly given, and a thorough reliance on the good will of the British Government.

52. After a parade of the Sind Horse they left, Sovereign and nobles apparently much pleased with their visit and in better humour with each other than when they arrived.

53. I have entered into these details in the hope of setting clear before Your Lordship in Council the present state of Belochistan which appears to me a matter of far graver importance than we have been accustomed to consider it, and which should, I am respectfully of opinion attract the immediate attention of the Government of India.

54. The territory which owes a nominal allegiance to the Khan extends over a space of 70 or 80,000 square miles. The population though thinly scattered over sterile and half desert tracts, possesses considerable pastoral wealth, and is distinguished for the warlike character of the hardy and semi barbarous races of which it is composed.

55. The Ruler of Kelat commands one of the two main roads between India and Western and Central Asia. In a strategical point of view, his position is of great importance to every state between the Indus and the Euphrates or Caspian.

56. That the peace of such a country should depend upon the life or caprices of an utterly uneducated, self-willed, and not over promising youth, who has as yet no legitimate or recognized successor, nor possible heir, but an imbecile cousin of 12 years old might of itself occasion some anxiety to his neighbours. But the causes which render the proceedings of the Khan and his people most important to us, are only incidently connected with his personal character, or with the internal revolutions of his kingdom.

57. Belochistan has, besides ourselves, but two immediate neighbours, Persia and Afghanistan. The Afghans of Candhar, from their proximity and grasping, treacherous character, have always been a source of anxiety to the Khans of Kelat. Though generally much inferior to Belochees in real courage and other warlike qualities, their superior power, wealth, and restless intriguing energy, gave them great advantages, which they were always ready to use when occassion offered.

58. When Lieutenant Macanley arrived at Kelat he found that much anxiety had been caused by the receipt of a letter from Ghoolam Hyder Khan, the Sirdar of Candhar, couched in most friendly terms and stating that he had heard of the rebellious proceedings of the chiefs, that he had a large disposable force and would atonce, if permitted, march to the Khan's assistance. The Brohees however observed that anything would be preferable to admitting the Afghans under any pretence as Kelat was not likely to fare better at the hands of Dost Mohomed, and his sons than Candhar had done.

59. The Persians, though more remote, have been of late years more aggressive. About four years ago I drew attention to the fact ascertained by the late Mr. John Mcleod during an expedition which he made along the Mekran coast, that the outposts of Persia had advanced some 250 or 300 miles eastward of the line where Sir Henry Pottenger found them early in this century, and were still advancing, and I recommended that explanation should be required from the Persian Court of the reasons of this encroachment on a region so nearly a desert as to be worthless in itself, but which owed a nominal allegiance to our Ally the Khan of Kelat.

60. The Government of India however did not at the time concur in this view, and an officer of deservedly high authority, who was referred to on the subject as I understood, stated his opinion that the aggression was a matter of no moment and that it would be rather desirable than otherwise if Persia were to annex the whole of the Mekran coast up to Sind, as we should then have a regular Government to deal with, and there I believe the matter for the time rested.

61. During the late war, the value of the position thus acquired by Persia became manifest. The Persian Governor of Kerman was able to menace Kelat from the South West, whilst through the Khan's Kinsman, Azadkhan, the Chief of Kharan, intrigues were at work in the Persian interests to detach the Khan from his alliance with the British Government. For his services on this occasion, Azadkhan received from the Persian Gevernment in 1857 a grant of a small tract of country, South West of Kharan, which had never before belonged to him or his fore-fathers. I have placed in an appendix an abstract of those portions of the intelligence from time to time submitted to Government during the past year and a half, which bear on Azadkhan's conduct during the war. They prove conclusively that he actively espoused the Persian cause and rendered them essential service in their hostilities with the British.

62. Since the commencement of the Indian mutinies, I have reported to Government the receipt at Kelat of letters from Azadkhan urging a combination against the British. He has not yet acknowledged the present Khan, and his conduct since Nusseerkhan's death has been unequivocally hostile.

63. I observe from the correspondence just referred to, that both General Jacob and Major Merewether doubted the possibility of the Persians doing much mischief to us by their operations in Western Mekran. It may seem presumptuous to defer from such authorities on such a subject, but it is clearly matter of fact that Kharan had become a Persian outpost and that Kelat is as accessible from Kharan, as from Noshkey, which was occupied and held by our troops during our occupation of Afghanistan. But admitting what I do not think at all clear, that the lines of communication between Kelat and Kirman are not available for regular troops, taking their own time and choosing their own seasons to advance with the aid of the petty chiefs of the country and making good their ground as they go, still it is clear that there is nothing to prevent the advance of such an irregular force as would overmatch anything the Khan of Kelat unassisted could oppose to them and create much consequent confusion and alarm along

our whole border. I am certain that with money at their command, neither of the officers I have named would find it impracticable to move a Beloch force westward to Kirman from this side, and I cannot therefore suppose it impossible to move such a force—Eastwards from the Persian side, either with or without the possession of Herat.

64. I have already alluded to the effect produced by the Indian mutinies as shown by the conduct of the Hindoo Gangaram. This man is said to be a native of Delhi, where he has many relations, and through others, who are traders at Rohree in Upper Sind, he always received minute and accurate information of the progress of affairs in India, and made no secret of his belief, that our hands were much too full at home to trouble ourselves with our neighbour's affairs. I found that this belief in the extreme gravity of the present crisis and the consequent heavy pressure on our resources was very general throughout all this part of the Frontier, and apparently great pains had been taken to disseminate exaggerated accounts of our losses and difficulties.

65. There is also an almost universal expectation of a great revolution impending in Afghanistan and towards the North West. According to their information or personal views, men connect it with Russian Encroachments or the disorders likely to ensue on the death of Dost Mohomed. But for some months past, I have met no native of any intelligence or information on the affairs of Afghanistan who is not deeply impressed with this belief and I find that the observation of all officers who associate much with people from that quarter, coincides with what I have stated.

66. We have but few means of hearing the true position and proceedings of the Russians in Central Asia. But there is an almost universal belief among intelligent natives in these parts that Russia is rapidly though unobtrusively extending her influence and possessions in this direction and whether the belief be well or ill founded, it seems to me essential to the quiet of this Frontier that we should let all men know that we have at command a force ample to secure our own position.

67. The tremor and excitement caused by the Indian mutiny among the half reclaimed border tribes; the very precarious guarantees we possess for the maintenance of quiet and good order in Baluchistan, and the certainty that much disorder must ensue on the death of Dost Mohomed which cannot be a very remote event, were among the principal reasons which induced me to think that we ought to possess on this border a force greatly in excess of that which now hold it, and always prepared for active service at an hour's notice. No force of regular troops which we could station on this Frontier would fulfil this object so well as the Frontier Field Force; the organization of which has been so often recommended by General Jacob.

68. But since writing the above, I have received from General Jacob information which leads me to believe that the risk of the peace of the Frontier being broken is more imminent than we either of us previously supposed. The importance of the communication induces me to quote it entire. He states.

69. "Judging from information obtained by Major Green, it appears certain that the sole object of the rebellion of the chiefs and tribes of Belochistan against their young Khan was to place in his stead on the Khanate of Kelat, Azadkhan, the Chief of Kharan.

Dated 10th February 1858.

70. Kharan was formerly subject to Kelat, but for some generations has been held to be a dependency of Candhar, but its chief is actually nearly independent.

71. Azadkhan has for several years past been in constant communication with the Persian Government, while he frequently quarrelled with and sometimes made open war on the late Nasseerkhan of Kelat, who had married his daughter.

72. When the Persian army approached the Frontier of Belochistan in 1856, Azadkhan atonce joined it, and remained in the Persian Camp, making over his country to Persia, and receiving it back as a grant from the King.

73. Azadkhan is and always has been wholly in the Persian interest, and ready to aid that power in any designs or attempts in this direction. To make this Chieftain Prince of Kelat would be equivalent to making Baluchistan a Province of Persia, and would also greatly facilitate a junction between that country and Candhar.

74. Although the life of the young Khan was saved, and open rebellion at that time put a stop to by the presence of a British Officer, Lieutenant Macanley at Kelat in the month of October last, and notwithstanding the good effects of your late interviews with His Highness the Khan and his Chieftains, it is now evident that a very strong feeling against the young Khan, Khoodadad exists, and that the personal character of His Highness is not such as to encourage the hope that he will speedily overcome this feeling.

75. Most of the influential Chieftains of Baluchistan are not even at the pains of concealing the "expression of their dislike and contempt for their young Lord, Khoodadad, and their wish and intention to support Azadkhan in his pretentions to the Khanate of Kelat.

76. It is clear to me now that at any moment, open and violent rebellion may break out throughout the whole country from the Helmund to the sea, and that this is only at present prevented by the presence of Major Green with the Khan of Kelat.

77. The minds of all the Beloch tribes on and near the Frontier as well within as beyond the British territory, are much disturbed. The Boogti Chief Moortzakhan, who was present at your late public interview with the Khan of Kelat, has since then, with that portion of the Boogti tribe under his control, joined and entered into close alliance with the Murrees of Kahun; and these predatory hill tribes are being joined also by lawless and discontented individuals from various quarters from the Punjab, Belochistan and Sind.

78. Some of the Jekhranees and others within our own territory have been gradually sending away their cattle to the neighbourhood of the hills on pretence of grazing and have also lately been sending their families in the same direction.

79. The results and circumstances now reported in no wise differ from those contemplated by me in my letter No. 8 of the 9th January 1857, written when acting Commissioner in Sind to the Right Honourable the Governor of Bombay in Council; but it appears nevertheless my duty now to report them as they occur for your information.

80 I will now very briefly review our position. Along 500 miles of this Frontier, and I believe for some hundreds more to the Northward, it is not possible to maintain European troops in permanent garrisons during the hot season—from April to October. It is a matter of physical necessity that we should habitually defend the whole of this Frontier line with native troops alone, keeping our Europeans in reserve at Karachi or similiar stations, where the climate enables them to live in health and efficiency.

81. It is not mere physical force that is wanted. When a Major-General at this place (Sukkur) commanded Upper Sind as a separate Division with two strong Brigades of all three arms and with a large proportion of Europeans, the Frontier was never so quiet as when its guardianship was left to a single weak regiment of the Sind Horse, surrounded by doubtful and disaffected comrades. But it is necessary that there should be a suitable amount of physical force forthcoming when needed.

82. It is quite clear that 800 sabres of the Sind Horse do not constitute such a force, and that they might be overwhelmed by mere brute numbers, if the moral influences which have hitherto kept these multitudes in subjection were withdrawn or even temporarily forgotten in the excitement of internal revolution or foreign invasion.

83. I take it for granted that the return of the first Regiment of the Sind Horse to their Head Quarters on this Frontier will not be much longer delayed. It was in the confident expectation that they would have been here by the middle of this month that I considered this portion of the Province might have been safely denuded of regular troops during the season when European reinforcements are passing through the

Province, and I concur with General Jacob in thinking that their return cannot be delayed any longer without considerable hazard of the paucity of our apparent Military force being mistaken for an indication of weakness and inviting aggression.'

84. In the course of a month or two more the European re-inforcements will all have arrived and passed up the river and such real or apparent effect as their presence may produce will cease to be felt.

85. I see but little chance of those portions of the Bombay army which are now employed beyond the limits of the Presidency being able to return for some time to come, nor, if they did return, would even a large number of such troops place the same power in the hands of the General Commanding the Frontier as the small but thoroughly efficient and moveable body which he recommends should be raised as the Frontier Field Force. It is in such positions that the value of undivided power and responsibility are most felt. In my letter noted in the margin, it was I believe clearly shown that such a force might be raised at less cost than the existing Brigades at Shikarpur and Hyderabad, and that the great increase of efficiency will be attended with a saving of expense.

86. If the 1st Regiment Sind Horse were to return atonce and orders were immediately given to General Jacob to commence the organization of such a Frontier Field Force, the moral effect would, I think, be sufficient to obviate the necessity for any further re-inforcements of Native Infantry, though of course it will be many months before the newly raised Frontier Regiments can be really fit for service. But if no such measures be adopted, it will be absolutely necessary to replace in this Province at least the ordinary peace establishment of Infantry and Artillery and for the reasons already given, I cannot even then regard our position as one of entire security.

87. For I must add the expression of my deliberate opinion that no re-inforcements confined to this Province can afford more than comparative security and that our position can never be a really safe one, until we adopt the measure

which has been already repeatedly urged by General Jacob, of occupying Quetta as an outpost where in case of need a strong force could be assembled, commanding the access to the Bolan, effectually securing the key of our whole Frontier south of Guznee, and enabling us to check and flank any force which might threaten the northern part of the Punjab by the route of the Khyber.

88. Our existing treaty with Kelat expressly gives us the right to occupy such a position, and we have for years exercised the right by maintaining outposts at Shahpoor, Rojan, Gundoee, and other places well within the Kelat territory.

89. At present the Government of Kelat is most anxious to see us take this step as the only effectual barrier against Afghan treachery and aggression, of which, since the unexpected occupation of Candhar by Dost Mohomed three years ago, they stand more than ever in dread. The subject appears to be one of continual discussion among themselves; and the Brohees, while fully alive to the value of such a position to us, often declare that, until we occupy it, they can never sleep free from fear of their Afghan neighbours, and they express the most un-feigned surprise at our hesitation to occupy Quetta.

90. But the case would be entirely altered, if Azad-khan or any other nominee of Persia or Cabool were to succeed as ruler of Kelat, and we should most assuredly not only see Quetta effectually closed to us, but occupied by a garrison sealing the Bolan and able at any favourable moment to descend on Cutchee, and menace the line of the Indus.

91. I have the less hesitation in expressing my opinion that the occupation of Quetta as an outpost capable on occasions of re-inforcement is necessary to the safety of this Frontier, because that conviction has been forced on me contrary to all my preconceived views, so that I have the less doubt of the soundness of opinions to which I have become an unwilling convert.

92. I had always considered three arguments as militating most strongly against the adoption of any such measure.

93. First that such a move was a false one, in as much as it interposed the Bolan between our advanced outposts and the line of our Frontier, and placed our force in a position where it would be difficult to ensure sufficient supplies.

94. But if ever the Bolan is to be occupied or defended it must be commanded by a force so placed. The forces on both sides being equal, any other position, taken up with a view to command the Pass, would be simply useless, and the question resolves itself into one regarding the value of this entrance to India. If we are to control it we can only do it by occupying Quetta.

95. As to the difficulty of supplying a force so posted, it never was and never could be greater than the difficulty of supplying our present Frontier outposts. At first great difficulty was experienced in feeding four hundred men and horses at Jacobabad. But where the demand existed and protection was afforded supplies flowed in. Ten thousand men now live in plenty and cheapness whereas many hundreds formerly would have starved; and were the number doubled, they could be supplied quite as easily. Even if the Bolan were closed, and supplies from Sind and Cutchee were unattainable, it would be practically impossible to cut off supplies from Quetta, which can be fed from at least three other quarters and has much fertile country in its immediate neighbourhood. As matter of fact at present, a thousand or two of men more or less at Quetta, such as the force which usually accompanies the Khan, make as I am assured, little or no difference in the abundance or cheapness of supplies.

96. Moreover the experiment might be gradually made with a small force at first, which might be increased as the impossibility of its being starved out became apparent; but I have made much enquiry from various well informed parties on this subject of supplies, and feel assured that fears on this head are purely chimerical.

97. Secondly, an even stronger argument always appeared to me to be the danger of our being drawn in to take an active part in the internal affairs of States beyond our own Frontier. But this is a destiny which we cannot escape, and

which necessarily devolves on the paramount power in India. Our Indian affairs can never be matters of indifference to our neighbours in that quarter, nor can theirs be to us. For many years we have affected and tried to argue ourselves into such indifference, but the effort is contrary to nature, and has signally failed. Whether we like it or not, the fortunes of Dost Mohomed and his family, their alliances and antipathies expand or limit our trade, affect our exchanges, influence our military preparations; and the only effect of resolutely shutting our eyes to what passes so near us, is to force us to do hurriedly in comparative ignorance, and at disadvantage, when our eyes are opened, what might have been done, naturally and easily, had we not been so long wilfully blind to its inevitable necessity. From the day that Providence placed in India a paramount Government, wise, powerful, or just, as compared with its neighbours, it became quite impossible for that Government to avoid being drawn in to take an interest in its neighbours' affairs.

98. Thirdly, the argument which always seemed to me the strongest against posting a force at Quetta, was the supposed possibility of taking up such an advanced position at any time whenever the presence of impending danger might appear to render it necessary. But further observation and reflection have convinced me of the peril of trusting to any such expectations. The necessity of the step may be said always to exist, for it is absolutely necessary to enable us to watch events in calm security and to feel free from constant apprehensions. It is vain to expect warnings from unscruplous neighbours, who are always armed, who need give no single note of preparation, and who might occupy Quetta as one of them has recently occupied Herat, and the other Candhar, coming suddenly in the guise of friends, and taking possession before we in India had sufficiently matured our means of obtaining intelligence to know whether the first reports we received of the occupation of the stronghold were true or false.

99. Much has been said of the insalubrity of the position, but the natives give it a good character in this respect. The climate is, to the feeling quite that of temperate Europe, and I have been assured by European officers, who have lived there during our occupation of Afghanistan, that the sickness was

not more than would have occurred in England, had the men been exposed in tents during autumn, winter and spring, and that properly housed, they would have been as healthy as in Europe.

100. But this is a point on which further and more conclusive information might be easily obtained if a properly qualified Medical Officer were attached to Major Geen and desired to report.

101. The present may not indeed be a convenient season for such a step, and it is possible that in neglecting to occupy Quetta as suggested by General Jacob during the Persian war, we have allowed the best, if not the only opportunity of making an important move unchallenged to pass by us, and that we may find obstacles now, which did not then exist. It is however certain that these obstacles will increase every day that such a move is deferred, and may in the end prove insuperable.

102. In any case, the difficulty of adopting the measures which promise the most complete security adds strength to the argument for taking a step to which no such objections can apply, and which affords the next best chance of security. I allude of course to placing, under the Political Superintendent, a force really adequate to the defence of the Frontier in ordinary times by means of such a Frontier Field Force as he has recommended.

103. The annexed rough sketch may serve to illustrate our position. It shows the navigable line of the Indus, with our Frontier in close proximity to the west. The great Sulleman and Hala ranges of hills form a barrier from Peshawar to the sea, almost impassable except at a few points of which the Bolan and the Khyber are the principal, both within our neighbour's territory. Quetta stands in the same relation to the Bolan gate in this natural rampart, as a ravelin or outwork covering the entrance to a fortress commanding a bridge over an unfordable river; and when menaced with attack, it will be clearly imprudent to leave these in the hands of an enemy, and wait the assault with our outposts drawn back several marches within the barrier which forms the main defence of our Frontier.

104. We can hardly be too prompt in improving our means of communication on this Frontier. There has been little extension of steam navigation along it since 1843, at which time there were no steamers on the Caspian or the Volga. There were, four years ago, 30 large steam Tugs on the Volga; there is now a considerable steam Flotilla on the Caspian; and there are said to be steamers on the sea of Aral and the Oxus. Possibly this latter assertion may be an Afghan invention, but it shows nevertheless the popular notion of what, among that people, is considered probable.

105. Among practicable improvements of our own communications, besides the Railway lines parallel to the Indus, which are of immediate importance, I would particularly mention the line from Sukkur to Dadur. It is 180 miles of almost dead level. The first quarter from Sukkur to Shikarpur and Jacobabad has been surveyed and would even now prove a paying line, and would be commercially profitable even with no more than the present amount of traffic.

106. I must apologise for the length of this letter, but my sense of the great and pressing importance of the subject made me apprehensive of omitting any details which could elucidate it and enforce the views I have ventured to advocate.

I have the honour to be, &c.

(Sd.) H. B. E. FRERE,
Commissioner in Sind.

COMMISSIONER'S OFFICE,
Camp Kandiaro, 19th February 1858.

Selections from the Records of the Commissioner in Sind.

SELECTION No. IV.

Memorandum of portions of correspondence between the acting Commissioner in Sind and Government relative to the attempts of the Persians to obtain a footing in Mekran, and to the aid afforded to the Persians by Azad-khan of Kharan.

Submitted to Government in 1856.

Memorandum of portions of recent correspondence between the acting Commissioner in Sindh and Government relative to the attempts of the Persians to obtain a footing in Mekran and to the aid afforded to the Persians by Azadkhan of Kharan.

Commissioner to Government No. 217 of 16th December 1856.

Azadkhan of Kharan about four months previously sent presents and letters to Tehran offering to acknowledge himself as a Persian subject if the King would release his nephews who had been captured by the Persians at Dezuk. It was supposed that the King was inclined to comply with Azadkhan's request.

Commissioner to Government No. 223 of 27th December 1856.

2. A news letter from Candhar states that a messenger had come to Sirdar Ghulam Hyderkhan at Candhar from Azadkhan of Kharan and had given the Sirdar some message to which the Sirdar replied that he was much disturbed by such words, that Azadkhan would be bringing reproach on his brother the Khan of Kelat whom the Sirdar now considered as his own brother. The exact nature of the communication is not stated, but it would appear to have been something inconsistent with friendly relations with the British Government.

Commissioner to Government No. 12 of 13th January 1857.

3. A Persian Envoy from Kirman arrived at Candhar and sought to open a negotiation for alliance between the Persians and Dost Mohomed. His offer was declined by Ghulam Hyder Khan mainly on the ground of Afghans being in alliance with the British. This was just before the meeting between Dost Mohomed and Sir John Lawrence at Peshawar.

Commissioner to Government No. 68 of 26th February 1857.

4. The Persians who had occupied Banpoor in force, were reported to be threatening Western Mekran under the guidance of two Beloch Chiefs, one of whom had been for some time a prisoner on parole with the Persians. One division was to march on Hudj Mekran, the other on *Kharan*. These moves were popularly believed to be owing to the Kirman astrologers having told the Shah of Persia that he was to rule over all the dominions of Nadirshah, Candhar and India of course included.

5. Reports progress of the Persians towards Kharan, and gives details of the local politics of Kharan and Jalk. It was pretended or supposed that the Persian advance on Kharan was to overawe Azadkhan and make him comply with the demands of his neighbour, Alumkhan, Chief of Deejuck and Jalk, who had openly espoused the Persian cause, and had occupied Jalk the year before in the Persian interest.

Commissioner to Government No. 75 of 5th March 1857.

6. The Persian troops in Mekran had been recalled to re-inforce the Army before Bushire, except 500 sowars who were left to aid Azadkhan in holding in the Persian interest Jalk, Deejuck and Seb, within the Kelat territory in N. W. Mekran, which had been occupied by the Persians in the summer *1851 before Herat was taken by them.* There being a demand for troops to press the seige of Herat, the Persian troops had been withdrawn from Northern Mekran, and the places they had occupied made over to Beloch Chiefs of the country—Azadkhan, &c.—who had been taken into Persian pay. The offer to serve Persia was volunteered by Azadkhan. Even before this time the conduct of Azadkhan in allying himself to Persia had formed the subject of remonstrance from the late Khan of Kelat to Ghulam Hyderkhan at Candhar to whom he had previously professed allegiance after declaring himself independent of Kelat some years ago.

Commissioner to Government No. 106, dated 21st April 1857.

7. Details of Azadkhan's overtures to the Persian. When the force of the latter occupied Banpoor, Azadkhan sent two confidential messengers to the Persian General, Commander-in-Chief in Kirman, who in reply sent him a present of Rs. 1,250 in cash, some valuable arms and a dress of honour, and informed him that if Azadkhan were as he had always professed, a subject of the King of Persia, this was the time for him to do good service. The news of these mutual advances of the Persian General and Azadkhan towards a good understanding had had the effect of inducing the Chief of Deejuck, and Mir Bijar Khan, a man of note in these parts, both deadly enemies of Azadkhan, to deliberate about trying

Commissioner to Government No. 102, dated 15th April 1857.

to forestall him by tendering their submission and services to the Persian General before Azadkhan could come in. There was a general feeling throughout Mekran that the country must shortly fall into the hands of the Persians.

8. Letters had been received by the Khan of Kelat from the Persian Governor of Kirman, announcing his own appointment, inviting the Khan to correspond with him and to be on terms of friendship. Another from the Persian Commandant at Banpoor of similiar tenor, exhorting the Khan to follow the path of God, "to think just only of God and his Prophet", then "of God's servants of the true faith", and that infidels—the English—should not be allowed to remain in the country of the true faith. The Khan is then reminded that "the infidels who have wicked schemes in hand only wish to sow dissension in Islam and thus avenge the English armies destroyed at Cabul, Candhar, &c." But the Khan had allied himself to them—this was useless. He should adhere to the straight path, establish the faith, and gain blessings in this world and in the next. That the Khan could do as he pleased, but if he took the present opportunity for breaking with the English he would gain the protection of Islam and of the King of Persia, as defender of the faith. "Lift your hands from the" Kafir's wealth (cease to receive the English subsidy) and turn to the protection of Islam". The writer has military stores, artillery, &c., in abundance, and if the Khan would make known his wishes, they should be complied with. The letter was sent by a confidential messenger who would further explain the writer's wishes.

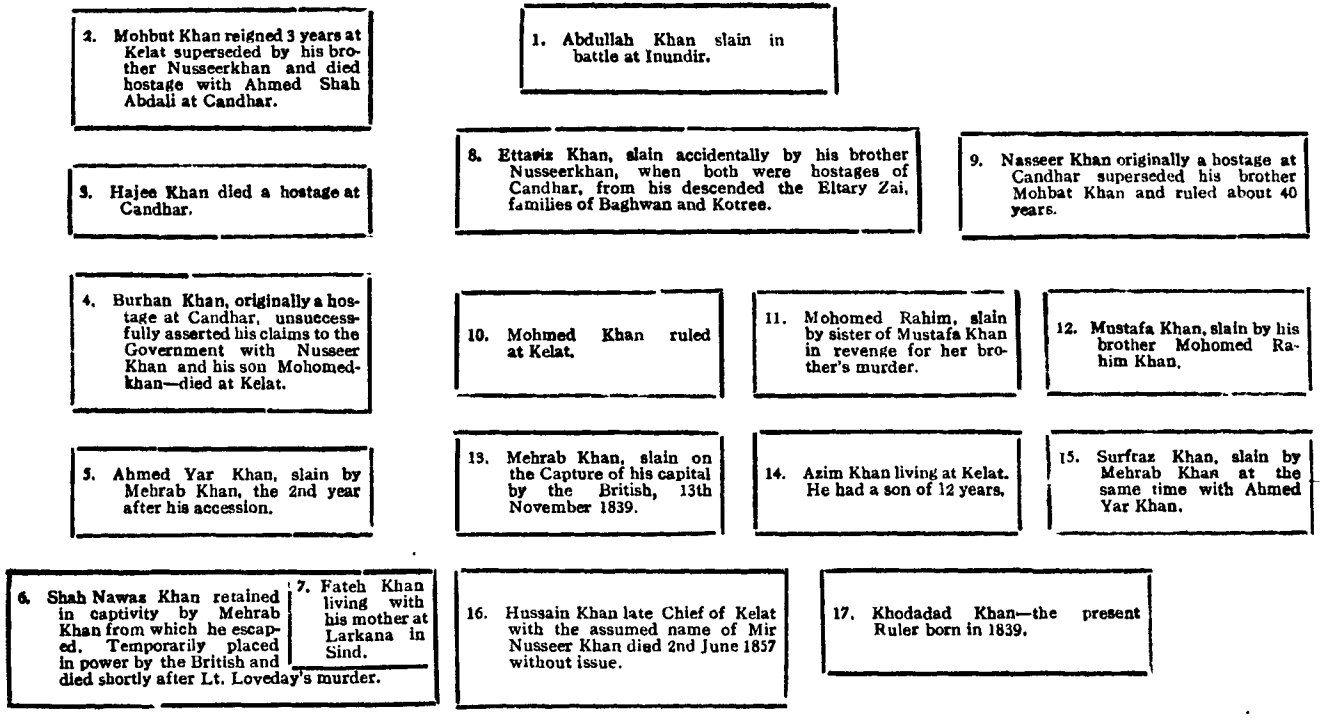
Commissioner to Government No. 199 of 1st July 1857.

9. On the 15th May, 2,000 Persian Cavalry arrived at Banpoor and sent detachments to Jalk, Deezuck and Seb to make over charge of these places to Azadkhan, of Kharan, whose nephew was one of their party. Letters from the Persian authorities were at the same time sent to the Khan of Kelat by a man long resident in Deezuck, who received handsome presents before he was despatched.

Commissioner to Government No. 204 of 3rd July 1857.

Azadkhan had written to the Bibi Gunjam, step-mother of the late Khan of Kelat, apparently with the object of reopening his communications with Kelat. He condoled with her on the late Khan's death, pointed out how his own interests were identified with the general interests of Balochistan and that he would have come to Kelat but that he doubted whether he would be welcome. He had heard of the rebellious proceedings of the chiefs and offered, if allowed to come to Kelat, to mediate between them and the young Khan. He would do anything to prevent discord in the hills. Because its existence would lead to difficulties with the Kafirs (English) and if the people of Kelat had any strength and wanted to fight, let them fight the Kafirs which would be pleasing to God and the Prophet.

Commissioner to Government No. 341, dated 22nd September 1857.


1. Abdullah Khan slain in battle at Inundir.
2. Mohbut Khan reigned 3 years at Kelat superseded by his brother Nusseerkhan and died hostage with Ahmed Shah Abdali at Candhar.
3. Hajee Khan died a hostage at Candhar.
4. Burhan Khan, originally a hostage at Candhar, unsuccessfully asserted his claims to the Government with Nusseer Khan and his son Mohomedkhan—died at Kelat.
5. Ahmed Yar Khan, slain by Mehrab Khan, the 2nd year after his accession.
6. Shah Nawaz Khan retained in captivity by Mehrab Khan from which he escaped. Temporarily placed in power by the British and died shortly after Lt. Loveday's murder.
7. Fateh Khan living with his mother at Larkana in Sind.
8. Ettaziz Khan, slain accidentally by his brother Nusseerkhan, when both were hostages of Candhar, from his descended the Eltary Zai, families of Baghwan and Kotree.
9. Nasseer Khan originally a hostage at Candhar superseded his brother Mohbat Khan and ruled about 40 years.
10. Mohmed Khan ruled at Kelat.
11. Mohomed Rahim, slain by sister of Mustafa Khan in revenge for her brother's murder.
12. Mustafa Khan, slain by his brother Mohomed Rahim Khan.
13. Mehrab Khan, slain on the Capture of his capital by the British, 13th November 1839.
14. Azim Khan living at Kelat. He had a son of 12 years.
15. Surfraz Khan, slain by Mehrab Khan at the same time with Ahmed Yar Khan.
16. Hussain Khan late Chief of Kelat with the assumed name of Mir Nusseer Khan died 2nd June 1857 without issue.
17. Khodadad Khan—the present Ruler born in 1839.

13. Mehrab Khan had 5 wives, 1. Daughter of Mustafa Khan, Becbee Gunjamun. 2. A daughter of Jam Ali, late Ruler of Lus Beyle. 3. Bibi Sudgunj or Mulganj, a daughter of Eltazkhan, Ahmed Zai of Kotree and mother of his son Hassan Khan, the late Khan. 4. A daughter of Assil Khan Sherwanee, now a cripple. 5. Kujoo or Kujaja, a slave girl, mother of reigning Khan.

5. The widow of Ahmed Yar Khan is living at Larkana, a Pensioner of the British Government, her surviving son, No. 7. Fati Khan generally lives with her.

16. The late Khan had two wives. One the daughter of Azad Khan of Kharan, but left no children.

Selections from the Records of the Commissioner in Sind.

SELECTION No. V.

Journey from Mandvi to Hyderabad (Sind) and from Hyderabad to Khairpoor and back (December 1831 to May 1832) Narrative of a—by Lieutenant E. Delhoste, Surveyor, Sind Mission, of a—

Report on a journey from Mandvi to Hyderabad by a member of the Sind Mission.

On the 21st December 1831, I arrived at Mandvi for the purpose of joining the Sind Mission, to which (at the recommendation of Lieutenant Colonel Pottinger), I had been appointed Surveyor and Draftsman. I found the officers of the Mission busily engaged in preparing for. journey. The party was as follows:—

Lieutenant Colonel H. Pottinger	...	Envoy,
Mr. P. Scott ...	...	1st Assistant,
Captain W. Pottinger	...	2nd Assistant,
I. A. Sinclair ...	...	Assistant Surgeon.
Lieutenant J. Morris ...	...	Commanding the Escort,

to which I was also attached.

On Thursday, the 29th of December, we left Mandvi and proceeded to Lyjah, a small village, distant $7\frac{3}{4}$ miles. The country was in a high state of cultivation and the road good. The village of Lyjah belongs to a Jharrejah named Mallagee, it contains a population of 700 people of all sexes, 200 head of cattle, and 60 ploughs. The soil of this part of Cutch is rich and productive. Cotton is grown in great abundance. The revenue realized this year by the owner of the village was 16,000 Coories exclusive of cotton. There is a small Gurrye in tolerable repair situated in the village.

December 30th, 1831.—Detained at Lyjah in consequence of the falling of much rain during the night.

December 31st, 1831.—In the evening the raining ceased, we moved on to a small village Bahit. Our road to it lay over a fine level country, the state of it highly cultivated. Our distance to-day was only 4 miles, the rain having considerably injured the roads. Bahit though only a village of 200 houses contains population of 500 inhabitants, and one hundred ploughs, the soil is richer and more productive than that of Lyjah.

January 1st, 1832.—A march of 7 miles over a country similar to that passed, yesterday brought us to Sabrye, a walled town containing 350 houses, 800 inhabitants and 80 ploughs, the walls have considerably suffered from the earthquakes and are in several places nearly destroyed. Sabrye also belongs to a Jharrejah (as indeed in most of the villages in this Abrassa which is considered to be the richest Pergunnah of Cutch). Many chiefs pay no tribute to Rao.

January 2nd, 1832.—Leaving Sabrye we proceeded to the small village of Warrah, distant 11½ miles—we passed Vinjan, a large walled town, which like other places in Cutch, bears the marks of having severely felt the earthquake of 1819. The whole eastern face of the wall is in ruins. The country passed over to-day was similar to that already described, the principal production about Warrah appears to be cotton. Warrah contains 60 houses, 200 inhabitants and 40 ploughs.

January 3rd.—Halted at Warrah.

January 4th.—After breakfast we left the village and continued our route to Teyrah, distant 11¼ miles. The country the same as in yesterday's march, the road was more sandy, passed on the road the small villages of Beechoonda and Konatia.

Teyrah is a large and populous town belonging to a Jharrejah named Soomrajee the place is well supplied with water from two large tanks. The population is said to amount to 3,600—houses 800, ploughs 750—Soomrajee's revenue this year was said to be 40,000 Coories

East of the town is an extensive burial ground containing at least 7 or 8 thousand tombs—it stretches in length nearly ¼ mile and has a pretty appearance from the largest Tank.

The burial grounds in Cutch contain Tombs such as I have never seen in any other country. At the head of most of the graves is a large high stone with a figure, either that of a man or a woman according to the sex of the deceased on

others were seen two female figures, a hand and arm-a warrior on horse back, each of which has its signification.

Such is the account I had from the villagers which would lead one to believe that those dying a natural death had no tombs erected to their memory which indeed I am told is the case, unless the deceased is a Rajah, Rajpoot or Jharrejah

January 5th.—We continued our journey this morning 11½ miles to a small village called Badra. Our road lay through a country very different from that south of Teyrah at which place the rich soil seems to cease.

The road to-day was winding and sandy, the country wild and irregular, with little or no cultivation—low jungle such as kureel, bauble, milk bush, and pelen, were the only productions. Budras belongs to the Rao of Cutch—contains by the Patells account (which I doubt) 400 houses, 800 inhabitants and 15 ploughs. The Rao receives one Kulsee out of every 10, for the unproductive or inferior fields, and one Kulsee out of four for the best fields, there is little or no cotton grown here.

January 6th.—Left Badra this morning at 10 a.m, arrived at Mhur, distant 7 miles, the road over a miserably sterile country and the latter part of it winding among the succession of low stony hills; Mhurr is a tolerably large village partly walled and situated in a small valley.

It is an enam to a Gossai called one Capree Raval. At this place are the Alum mines which produce a yearly revenue to the Roy of one lac of Coories. The mines were not worked while we were there and I had no opportunity of seeing the process making alum; Mhurr, I was informed, contained a population of 900—and 600 houses. From the extent of the place I should say this statement was considerably less than the real number of inhabitants, or houses; on the Hill above the Town is situated the celeberated Temple of the Goddess Asserapoore. That is her former residence of late years. She has been removed to a Temple near the town, probably more for the convenience of her worshippers than for that of

the lady herself, though her votaries do not scruple to affirm that she was removed at her own request in consequence of disliking the exposed situation.

January 7th.—Halted at Mhurr.

January 8th.—We proceeded this day $7\frac{1}{2}$ miles to the small village of Kora, the country wild and studded with low jungle—for the first 5 miles, when we crossed a low range of Hills—from this to the village there was some cultivation, principally Jowaree.

Kora belongs to the Rao—has a population of 500 souls and contains 75 ploughs—there is a river east of the village and a tolerably large Tank south-west of it.

January 9th.—Proceeded 9 miles to the small village of Oomersier the country level, but uncultivated, soil poor, and unproductive, the village belongs to the Rao. Contains 55 houses, 60 men, 35 women, 30 children and 35 ploughs.

January 10th.—A ride of 5 miles over an undulating sandy country totally uncultivated, indeed scarecely even, producing jungle plants, brought us to Luckput. The walls of this town cover a larger space of the ground as may be seen by the plan of it—it is however but thinly inhabited and indeed to me it appears surprizing that there should be any inhabitants in it at all, except the garrision. The country all round it, is a misrable unproductive waste, and the commercial business formerly carried on here, no longer exists—Luckput was considerably increased by 'Futty Mohomed' who considered it a place of first rate importance both in a commercial and Military point of view, but since the seas have been cleared of pirates and the voyage from the coast of Sind to Bombay, and other parts of India, has become comparatively safe—a more expeditious mode of transferring their goods has been opened to the traders, and Luckput has fallen to what it now is. A few horses from Caubul and Khorasan pass the way and perhaps a small quantity of rice and salt fish from Sind duties on which are I believe still levied at Luckput.

January 11th, 1832.—This evening at 5 p.m. by direction of Colonel Pottinger I proceeded on my way to Kotree to the Bunder, distant about 2 miles from the town, the road to this was over a muddy swamp always flooded in spring tides. There were several large boats at the place waiting for the tide, to cross the Karee between Luckput, and Kotree but as the small flat bottomed boats called Doondies can cross at all times, I took one of them and started for Kotree. The Bunder at Luckput is a miserable place, merely a few houses in the midst of the muddy swamp or runn just mentioned.

The distance from Luckput Bunder to Kotree is about 6 miles by the way I crossed, there is however another point where horses, and camels, generally cross at which the traverse is only about 2½ miles by water. I reached Kotree by 10 o'clock, the boat having been dragged across a great part of the way—a reference to the route book will explain this I believe though it is only possible to do so when the tide is out.

I may mention before taking leave of Cutch that I have said little or nothing regarding it except in enumerating the villages through which the Mission passed. Cutch is well known, and after what Lieutenant Burnes, and other gentlemen have written regarding it would be unnecessary my entering on its history.

January 12th, 1832.—I landed at Kotree about 10 o'clock on the night of the 11th and found the people ready to start for Lah, but as we had no guides we could not move until till morning. There is neither fresh water, house or shed at Kotree—not even a blade of grass, the whole country, as far as the eye can reach, is one vast tract of desert, similar to the Runn of Cutch. During the night the wind blew strongly from the north-east, and the weather was bitterly cold. I had no thermometer with me, but am convinced, had I had one, I should have found it considerably below 40°. At half past nine a.m. I left Kotree and proceeded to Lah where I arrived at 1 p.m. I conceive the distance to be at least 15 miles, the first nine of which are over the hard Runn before mentioned—

during the remaining 6 I observed stunted roots of bauble and pelew; affording an incontestable proof that at no very distant period this part of the country was not the unproductive and miserable waste it now is.

Lieutenant Alexander Burnes in his memoir on the Eastern Branch of the Indus mentions that the upper part of the Luckput Karree was formerly a rich and highly cultivated tract of land called the "Sayra"—that the Bund thrown across the Phurraun river by Ghulam Shah Kalora preventing the waters from flowing in their usual course—turned the whole of that land to what it now is—probably this part of Sind in those days was fertile and productive, though I am inclined to think that other rivers (or branches from the Phurraun River) must come down in this direction as the extent of this desert is too great to have been watered by one stream unless indeed that stream or what Lieutenant Burnes calls the Phurraun River was the original course of the Indus, a circumstance which does not seem improbable on considering the enormous breadth of Karee from Luckput to Kotree (full 8 miles).

I heard of the river as the Pooran but could gain no intelligence regarding the bund at Mora of which Lieutenant Burnes speaks, the only place called Mora in Sindi is near Meetanee on the Indus where a bund was constructed by Ghulam Shah Kalora for the preservation of the town of Gujjera which was near, being carried away during an inundation the only bunds I could hear of on the Poorun are one at Mirab-ka-Sher and Allah bund between Pallia and Rooma-ka-Bazar.

Lah is merely the name given to a halting place in a desert where there are two trees, a few bushes, and 15 or 20 small wells of brackish water, there are no houses whatever at this place and it is only distinguishable in the desert by two bauble trees which grow near the wells. The place has a curious appearance $\frac{1}{4}$ of a mile previous to arriving at it.

In addition to the low brushwood that grows near Lah there is a small plant called the Darum it is also called Lanah,

the camels which are bred in great numbers about the desert, feed on this plant which has a singular appearance at a little distance being something like heath, the leaves of it are almost as large as grapes but are salt and unpalatable.

A Hindoo Metah and a few sepoys reside at Lah the former collects the duties on exports, and the latter are employed to guard the Frontier, they said that in all they mustered 40 men, only 15 of them were stationed at this place the remainder being at Pallia, and Sugdan, these people informed me that they remained here during the rains, but I doubt the truth of their statement—a few days rain would render the whole of this desert perfectly impassable for horses, or camels, the soil being of that description which does not absorb the water.

The sepoys at Lah were the first Sindians I had ever seen, and I must say I was struck with their appearance, and costume, there was a frankness, and independence about them, which is always pleasing to a European, their caps and cloaks were made of quilted cotton, the under dress, was of coarse blue cloth. Each man was armed with a dirk, sword and matchlock.

January 13th.—I observe I have omitted to state the reason for my having been sent forward, it was, that I might see that the necessary arrangements for ourselves, and cattle had been made. I found that no grass, or very little had been prepared for the horses though the Sindian Wakeel stated there was abundance—by sending people out 3 or 4 kos I procured a sufficient quantity to last us during the short time we were to remain.

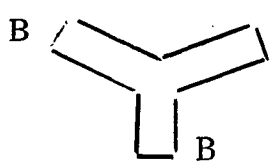
The water was also very scarce and became quite salt after exposure to the air, though when first taken out of the wells it was quite fresh and sweet.

January 14th —Colonel Pottinger and the other officers of the Mission joined me this day.

January 15th.—We left Lah at 7 a.m., intending to proceed to Bhorr.—said to be 7 kos distant—during the first 5 miles of our journey the Darun was the only plant visible—

afterwards the country was covered with a short grass, and stunted bushes of bauble, and tamarisk we passed two or three small salt pools which we were told had been formed by the late rain I make this remark here as I found afterwards it was false.

NOTE.—On our return to Cutch *via* Bhorr, I rode out to a small village, called Coggera-ka-Dand two miles from Bhorr, here I was surprised to find three broad water-courses, each almost half amile broad in this shape. It was said to come from near Muggurbhee and



B—B to run out into the Lukhput Karee near Busto bundur (there was abundance of fish in these canals) which probably occasioned the pools of water we saw in coming this day 15th January.

The track we were following appearing broad and easy to distinguish. Mr. Scott, Dr. Sinclair and myself cantered on, about an hour's riding brought us to some trees similar to Lah called Vire, here we mistook our road, and turned the right instead of going straight on. Sinclair who first said we were allright—That he was following the track of a horse—after an hour and a half good cantering all the time, I observed that there was the track of a horse having returned—shortly afterwards we discovered that the person whose track we were following had lost his way, and had turned round and gone back. We determined however on going straight forward and about half past eleven a.m., came to a few huts called Kantasir. There were two or three people here who were very civil, and asked us to get off and they would cook us some dinner. This however we could not do—so having got our direction which was nearly due west, we rode on untill we came to another small Waund—here one of the villagers a Jutt (Moosalman) gave us some butter, milk and his hooka to smoke—which I thought a tolerably good sign, that Indian prejudice had not extended to Sind—at last after another hour's ride we reached the tents quite tired having been upwards of six hours on the road and having travelled at least 40 miles. The other gentlemen had not been long in before us, and said the 7 kos were

at least 24 miles—the road though narrow was good, but unless the direction is well known, and a compass is used the chances are, a traveller would lose his way.

Bhoor is merely a collection of huts—the people being principally Seerwans, Jutts and Mohanas—the former rear camels. The Jutts are shepherds, and the Mohanas fishermen; they are all Mussulmans, but the latter are an inferior caste, and are rather shunned. There is a caste called Koobra or Koobla in Sind which is considered the lowest class of Mahomedans. The country round Bhoor is well irrigated by canals and water-courses, and produces abundance of rice, tobacco, barley, and sugar-cane, the canal which supplies this part of the country with water, comes from Muggerbhee or as it is sometimes called Bhee. We saw this canal (on our return) at Muggerbhee. It was not above four feet wide and six feet deep and yet sufficient to form the extensives sheets of water I have before mentioned.

At Bhoor we were met by two officers of rank who had been despatched by the Ameer to receive the Mission—their names were Mohomed Khan and Hyder Khan, the former Governor of the Province (Jattee) and the latter his Deputy. The dress of these gentlemen varied very little from that worn by the sepoys the only difference was, that the materials of which their clothing was composed was more costly.

January 16th.—Halted at Bhoor. In a direct line Kotree may be about 38 miles from Bhoor, and an army with little preparation might enter Sind by this route. Supplies in abundance would be found at Bhoor.—Rice in particular, water in plenty and a many head of cattle as would be required.

NOTE.—I have since heard that there are extensive swamps on this road. The best way would be *via* Pallia and Seeranee to Mohomed Khan-ka-Tandira.

On the 17th January.—We left Bhoor, and proceeded 13 miles to the Chundan—a small village of 250 huts, situated on the banks of a deep and broad canal, which is cut from the Goongroo River and extends about $\frac{1}{4}$ of a mile beyond the village where it is stopped. It is some what curious that the

Goornee after passing Wungee-ka-Shir takes the name of Goongroo though the real Goongroo is at Muggerbhee. The population of Chundan is 900 of all sexes, most of whom are Mahomedans. There are about 250 Hindoos here. The tomb of Peer Noor Shah situated nearly in the centre of the town of Roree is visible from Chundan bearing N. N. E. 2 kos distant, the whole country about Chundan is level and well cultivated watered by canals and water-courses, whose course may be easily traced by the tamarisk, and bauble trees which grow on their banks. This gives a very pleasing appearance to the country.

On conversing with some Hindoos who came to my tent, they gave me to understand that they were sadly ill-treated and said there was no justice in Sind such as in our country—that they had heard how happy the Hindoos were at Bhooj, and in other places under our Government—and they hoped we were coming to take Sind from the Ameers.

January 18th.—A ride of 18 miles brought us to Shah Kapoor or as it is more commonly called Kapoor. The country like that passed yesterday was level, and well cultivated and the road intersected with large and small water-courses, as far as the eye can reach, the country presents one uninterrupted plain, studded with tamarisk, bauble and other trees.—The principal productions, rice, barley and tobacco—the latter growing near the villages.

The soil is a rich alluvium Shah Kapoor or Kapoor belongs to Meer Ghulam Hussain Khan, son of Meer Abdullah Khan, I believe he is considered to be the rightful heir to the Government of Sind. On this subject Mr. Crow gives the following passage :—

When foreign attack no longer threatened Meer Sorab Khan with a majority of Talpoors and other Chiefs proposed that the son of Meer Abdullah Khan, Meer Ghulam Hussain—who was now arrived at years of descretion should assume the Government of Sind, to which by direct descendancy he was heir, and in consideration of whose minority only, it had, it was

urged, been entrusted to Meer Futteh Ali Khan. The proposal appears to have nearly occasioned civil war in Sind, but eventually Meer Ghulam Hussain Khan, acknowledged the sovereignty and accepted the Territory he now holds.

The town of Shahkapoor may contain 3,000 inhabitants, the greater part of whom are Lohanas (Hindoos). To the east of the town (which bye the bye is also situated on the bank of a deep, and very broad canal) are the ruins of an extensive fort, and large city, said to have been the residence of Dadoo, a Soomrah Chief or Rajah. Probably Duhooda the last of the Soomrah Princes, who it appears died in the year of Hegira 694 or 1299 A.D., or 533 years ago. These ruins are of pucca brick of enormous dimensions, each brick is upwards of 20 inches long, and 8 inches broad. The water-course seems to have been close under the walls of this city—which by all accounts as far as the natives can tell must have been a beautiful place.

The water-course comes from the Goongroo River, and continues on the Futtypoor 6 kos from Kapoor, I cannot say I believe this water-course to be entirely artificial, from its breadth upwards of 80 yards, and the quantity of rushes, and high reeds in it.—I think it not improbable that it was formerly the course of a small river. I afterwards discovered that this is a part of the Goonee which takes the name of Goongroo after passing Wunne-ka-Sher. There were several boats at this place of 5 or 6 Karars burthen. The Kharrar or Karrar is somewhat more than 3 Candies.

January 19th.—A march of $9\frac{3}{4}$ miles brought us to Meerpoor a large walled town belonging to Meer Ali Moorad the son of Meer Thara. The walls of the town (as indeed are almost all the houses, and buildings in Sind) are composed of mud —and are very extensive. The bazaar contained upwards of 300 shops and the population I estimated at 10,000; On questioning some of the towns people regarding the number of inhabitants, they answered that they were about 8,000 people in the place. How many of them are Hindoos. Who counts the Hindoo-dogs :—They are not considered :—a reply which

gives a sufficient proof of the manner the Hindoos are treated in Sind—I should have remarked that from the time of our entering Sind we had undergone much annoyance from the curiosity of the inhabitants and the amazing number of Syedds and Fukeers that came to beg—but at this place the crowds of people that surrounded us forcing themselves on our tents, so as nearly to tear them down was particularly disagreeable; beggars, by hundreds came about us—many of them well dressed and wearing shields and swords and some of them were mounted on tatoos—entreating for charity. The most moderate of these fellows asked for 2 or 3 rupees; others requested 100 or 150; at the same time declaring, they would not go away until their demands were complied with—They generally asked alms as if it was a matter of right and usually if not attended to, abused us before going away.

But our ride from Kapoor to Meerpoor was through a part of the country which deserves to be mentioned. The first three miles of our route was in a westerly direction—along the banks of the water-course before mentioned, here we came to a bund by which in this season only the water-course is passable, but only so for horses and camles; as wheeled carriages are not found in Sind roads cannot be expected—indeed most of those which I have called such are merely wide footpaths.

The bund over this water-course is narrow winding, and thickly studded with tamarisk and bauble bushes, which grow out of the water in some places,—towards the end of this bund a space of about 10 feet had been cut to let the water pass, and over this was constructed a rude bridge, composed of tamarisk boughs with earth thrown over them, the coarseness and pliability of this Sindian contrivance led me to doubt its safety—however the horses, and camels passed over without accident; after crossing the bund and bridge, we came to the small village of Sutianna, round which there was a good deal of cultivation, the village consists of a few huts inhabited by cultivators; from this village we pursued our road over an uncultivated plain, but intersected by water-courses to Joghee, a village taking its name from its inhabitants who are principally of that caste or sect. To the west of the village, was a

fine grove of bauble, and other trees, out of which rose a pretty white Tomb, or mosque called Jampeer. Passing through Joghee we continued our course over a salt flat to Meerpoor—about a quarter of a mile before reaching our ground we came to some people who were making salt, process was very simple. Earth from the plain was collected in large earthen dishes over which water was poured and left to evaporate.

A Belochee at Meerpoor asked me if the Government would take him as their servant, that if so he would bring 500 men with him—a circumstance which does not say much in favour of the attachment of the Belochees, the most favoured class in Sind, to their present Rulers.

January 20th.—We left Meerpoor after breakfast and continued our journey to Bulrey, distant 10 miles passing on our way the village of Deokur, which contains 300 houses, and about 700 inhabitants from thence we passed through a large town called Jokh, situated on the bank of a large and deep water-course both of these places belong to Ali Moorad of Meerpoor. The whole distance was through a cultivated and level country, but from Jokh to Bulrey our road lay through a thick tamarisk jungle.

Bulrey is a pretty town surrounded with high trees of different kinds, the bauble is however by far the most numerous—the velite bauble, a slender straight tree something like the cypress, growing higher than the other trees, gives a pretty appearance to the villages and towns in Sind. The population of Bulrey is about 2,000, a great number of whom are Fakeers and Syedds, the town contains upwards of 800 houses. The mosque and Tomb of Peer Kurreem Shah, is near the town it is a beautiful building covered with lacquered tiles of various colours, which at a short distance appear like porcelain. These tiles are made at Tatta and Nusserpore. Bulrey and Jokh enjoy certain privileges with regard to its customs and taxes in consequence of their being partly inaams to Syedds, there is a large Melah here in March every year. I was told that goods coming to the Melah, which lasts 3 days, paid no duty.

January 21st.—Halted at Bulrey.

January 22nd.—A march of 9 miles brought us to Doondee, passing in our road to it the small villages of Syedpore, and Katiar, at the latter place Meer Ali Moorad's Territory ends ; the road was through tamarisk jungle, and cultivation alternatively and intersected by four deep water-courses, supplied from the Pinyaree branch ; shortly after leaving Katiar we passed the tomb of Peer Ghulam Hyder, situated like most of these religious buildings in a pretty grove of trees ; the remaining part of the road was through low tamarisk jungle.

Doondee is a tolerably large place containing 1,500 inhabitants and about 500 houses ; there is a square Gurrye in the centre of the village the walls of which are of mud and about 15 or 18 feet high, it is a place of no strength, and appears to have been constructed more for convenience than defence. I was told that about 80 years ago, this was a very large place, being then 8 times its present size ; extensive ruins to the west of the town seem to corroborate the assertion—there is a deep water-course north of the place. The country from Katiar northward belongs to Meer Moorad Ali Khan.

January 23rd.—Left Doondee after breakfast and proceeded over a level and well cultivated countary to Sunneja, a small village of 50 houses ; the road was here and there crossed by water-courses ; some of them deep and broad. Shortly after leaving Suneeja the road runs on a high and broad embankment built by Ghulam Shah Kalora at an enormous expense, I believe, in order to form reservoirs or spacious tanks, for irrigating the surrounding country. Rice cultivation was on each side of the embankment, which latter was damaged and broken in several places. We continued our route on this embankment, until within a short distance of Katiar* when crossing fields of cultivation we reached our camp at Teekoor, and found it pitched in an extensive grove of mango trees (which formed part of a garden belonging to the Ameers) on the banks of the River Indus, which was good $\frac{3}{4}$ mile broad with a current of $1\frac{3}{4}$ miles per hour, a little below this village, the Fulleli joins the Indus, the mouth of the former

* NOTE.—The extent enclosed by this bund is very great and during the floods I have no doubt a lake of 15 N. W. miles in circumference is formed here.

was very narrow, and choked up with sand. Indeed had I not been told that it was the Fulleli, I should have supposed it to have been an artificial water-course,—it was about 18 feet deep, and 30 yards broad. A Jumptee or State Barge, of the Ameers was at this place; it was 60 feet long, with two wooden cabins on the Deck. There were also 20 boats of different size all flat bottomed, and from 10 to 30 Karars burthen—Boat of 30 Karars would contain 80 men in crossing the river—but, if for a voyage of several days, not more than 35 or 40.

January 24th.—Leaving Teckoor after breakfast, we proceeded along the left bank of the Indus for about a mile—we there passed through part of a Shikargah belonging to Meer Noor Mohomed and then through cultivation for nearly 4 miles. On the right of the road is a low range of hills, called the Gunja Jubbul. After leaving the Shikargah the road winds along the base of the Hills and the country on the left hand only is cultivated—passed a waund called Shah Meanka Wussed, and from thence through cultivation to the Camp, which was pitched opposite Karracoe—the latter being on the right bank of the Indus. The country between the river and the low range of Hills before mentioned is highly cultivated, and produces rice, barley, tobacco and Indigo.

The Shikargahs we passed were merely enclosed jungles—they generally ran along the banks of the river, and extend for several miles, so it may be said that the best ground in Sind is wasted on these pleasure grounds; The Ameers seldom visit the same Shikargah, above two or three times in the year unless it is situated near Hyderabad. The poor people are not permitted to enter these preserves and I was informed that people caught, in the act of killing game in these places, or even in their vicinity, were often punished by death—a degree of tyranny which I think too disgraceful to be credited.

Karracoe appears a large village and is said to contain 200 inhabitants. To the westward apparently distant about 15 or 18 miles are some low hills called the Kara or Kala Jubbul. The Indus here was much the same breath as at Teckoor but it was very low at this season from the marks on the banks, I should think the river must be nearly $1\frac{1}{2}$ mile broad at this place when full.

January 25th, 1832.—This morning I rode on to Hyderabad for the purpose of reporting on the encamping ground pointed out by the Ameers, the distance was about 5 miles and the road along the base of the small Hills, which terminate about a mile before arriving at Hyderabad.

I found the place for our encampment was an extensive piece of groud, nearly south-west of the City, pretty well supplied with water, from a number of wells in a Nullah about 100 yards to the rear. Being anxious to visit the other grounds I rode round the fort, and through part of the suburbs of the City to the Fulleli; where the former Mission was pitched. The ground was however uneven and not sufficiently extensive for our Camp. I therefore rode round the City and returned to the first spot I had visited, where I marked out the Camp facing south. On our left the City and Fort, on the right distant about $2\frac{1}{2}$ miles the Indus, and to the rear the Nullah in which were the wells, beyond which on a small rising ground was the Tandah of Wali Mohomed Khan Lagharee.

My business being concluded I returned to our Camp at Karracoe to breakfast, after which I drew up the following account or description of Hyderabad of which a sketch plan accompanied my memo: on Sind.

The latitude of Hyderabad by Lieutenant Burns' account is 25°-22' north It is situated on a small Island formed by the Indus and Fulleli Rivers, the former is about 3 miles distant from the City and the latter at most $\frac{1}{2}$ mile, both the Fort and City are built on a low rocky ridge which does not in any part exceed 35 feet in height. The Fort in south of the City is in shape an irregular-Pentagon and is composed of a curtain or wall of pacca bricks, flanked by round and square Towers. The walls do not exceed 40 feet in height, are built of pacca brick and chunam—but plastered over with mud. They rise from the very edge of the rocky ridge, and are in many places falling fast to decay—half an hour battering with 4 eighteen pounders would throw down any part of the wall which in falling would form a very pretty paved road into this attempt at fortification. The interior of the Fort is occupied by the Ameers and their families, and in the centre of it stands an

enormous Bastion or Cavalier, in which, it is said are deposited the treasures of Sind, to the eastward about 600 yards distant from the fort, is the Fuleli. To the westward Wullee Mahome d's Tandah, and the Indus—and to the south a fine plain from which the fort might be attacked with much advantage, as by fixing on this side for an attack the garrison could receive no assistance from the people in the town whose houses are all situaed to the northward of the Fort. A glance at the Military sketch will better explain what I mean. On the side of the town there is a ditch round the Fort of 30 feet wide and about 20 feet deep over which a miserable wooden bridge leads to the entrance of the fort. There are four gateways to pass before gaining the interior of the place but if ever attacked it would save a great deal of trouble and time to break down the south wall by which improvement I should think the place would prove much more cool and comfortable.

The City of Hyderabad is situated on the same rocky ridge as the fort and contains 10,000 houses; a casual observer would think this underrated, but each or most of the houses have large court yards to them which gives the appearance of there being more houses than there really are. The streets are exceedingly narrow and very dirty. The Bazaar runs from the gateway of the Fort due north nearly $\frac{1}{2}$ a mile—and all the houses are built of mud with terraced roofs. I estimate the population of this City at 25,000 and at least $\frac{1}{3}$ of this number are Hindoos—the remainder being Belochees and Sindians.

January 26th —We left our Camp near Karraccoe and arrived at Hyderabad. The position of our Camp will be seen by the plan. The wells in the nulla supplied us with water, the situation of our Camp was certainly not a pleasant one—it was extremely dusty and hot during the day but we were less annoyed by Syeds and beggars than we expected, this was owing to a guard of Sindians which Meer Moorad Ali Khan had directed to be placed over the Camp. Morning and evening however crowds of people came to satisty their curiosity, in gazing at the Feringies and their tents, the large Durbar tent in particular was an object which appeared to

strike them as being wonderful—the chicks at the tent doors also appeared to amuse them very much, and we often heard disputes as to what they were composed of.

On the 28th January we paid our first visit to the Rulers of Sind. We entered the City by a small narrow street the approach to which was filthy beyond all expression, and after winding through two or three narrow lanes—crossed the bridge and passed through three strong gateways, at the last of which we dismounted and proceeded on foot about 200 yards—here we came to a large carpet spread in front of a long verandah, advancing to the carpet we took off our shoes, and were introduced to the Rulers of Sind. They were seated on carpets in the centre of one of the ends of the verandah before mentioned. Meer Moorad Ali Khan was seated on a richly embroidered carpet, rather in advance of the others, he appears about 60 years of age, and has an intelligent though rather morose expression of countenance, his sons and relations were seated round him, they were all richly dressed; and their swords and shields, highly ornamented with jewels; Meer Moorad Ali Khan conversed for some time with Colonel Pottinger after which the Colonel presented his Lordship the Governor-General's letter, and shortly after we took our leave.

The Durbar was crowded with people of all ranks, pushing and fighting for places and paying no respect whatever to the Rulers of their country. This appeared strange to us, but we soon had many opportunities of observing the little control the Ameer has over his Belochee followers.

The place we were received in, was a long verandah supported by coarse wooden pillars, the walls of the place were bare, and dirty, and the whole scene was quite unworthy of the Ameers. This description may serve for all the interviews we had with the Ameers, several of which took place during our stay at Hyderabad. I was occupied during the time we remained here in obtaining information on the country, but this was a matter of no small difficulty. Meer Moorad Ali Khan had taken it into his head that we intended surprizing Shikarpore, and in consequence all our actions were watched, and

every thing done, or said in Camp, was daily reported to the Ameers, few of the Sindians entered our tents or conversed with us and I have since understood that orders had been issued to the people directing them to give us no information whatever about the country. The people I should say from their great desire to obtain service under the British Government; many requests of the kind being frequently made to me secretly through the men of the detachment of Auxiliary Horse that accompanied us are by no means attached to their Rulers, the Hindoos in particular are treated with the greatest contempt and injustice but more on this subject will be found in my Memoir on Sind.

Very little worth recording occurred during our stay at Hyderabad unless I may mention the preparations that were made, to repel the supposed intended invasion of the country by Kurucksing—these were most pompous. Guns such as they were, were dragged down to the river preparatory to being embarked, parties of Belochees left daily for Shikarpore and the Ameers mentioned that they themselves proposed starting in two days; I believe however it was all bombast on their part, and only intended as a ruse, to get the Mission out of Sind, or at any rate to prevent Colonel Pottinger proceeding to Khayrpoor. The proposed visit to Meer Rustom Khan–(who by the bye Meer Moorad Ali called his servant and slave) was evidently particularly disagreeable to the latter and every arguments he could possibly imagine was tried, in order to disuade the envoy from going to Khyrpoor; indeed at one time I thought that Meer Moorad Ali would have flatly refused us permission to advance.

Meer Mubarruk Khan (brother to Meer Rustom) who had arrived at Hyderabad from Khyrpoor to be present at the marriage of Meer Shahdad, eldest son of Meer Noor Mohomed, was pursuaded by the Ameers to use all his influence preventing the Envoy from going forward. He, Meer Mubarruk, accordingly represented himself as the Chief of Khayrpoor, said it was true his brother was the Chief but that he himself (Meer Mubarruk) was his counsellor and that he would settle everything without Colonel Pottinger's having the trouble

to go so far. The Ameers backed this speech—but Meer Mubarruk failed in his attempt and in the course of half an hour was the redicule of the whole party in consequence of his not understanding a phrase in Persian which the Envoy addressed to him.

The Colonel had written twice to Meer Rustom but had received no replies to either of the communications; under these circumstances he determined on sending an officer with letters to Meer Rustom, and kindly selected me for that duty.

February 18th, 1832.—Having received my instructions and the permission for my proceeding to Khayrpoor having been granted by Meer Moorad Ali Khan I returned to my tent to make a few preparations previous to starting, which I proposed doing as soon as the moon arose. I was about to mount my horse when a Belochee stating that he came from Meer Moorad Ali Khan arrived at my tent and said he had been sent by the Ameers to order me not to start until the morning. I saw atonce that this was a falsehood as we had numerous instances of Belochees using the Ameer's name in asking for gunpowder, flints, brandy, &c., when the Ameers themselves knew nothing of the matter.

I therefore informed my visitor that I was acting under orders from Colonel Pottinger and that I could obey none except from him; that Collonel Pottinger was now asleep, and he must therefore defer his visit until the morning,—by which time I hoped to be at Hala—So saying I mounted my horse and with my little detachment of 15 Auxiliary Horse proceeded towards Khayrpoor. I may here mention that I was entrusted with letters for Meer Rustom Khan, as also to make arrangements with him for the advance of the Mission, or if that did not suit him, for the advance of one of the assistants to Khayrpoor. Colonel Pottinger in his letter to Meer Rustom Khan begged he would not scruple to communicate to me his most secret thoughts, wishes and feelings towards the British Government and to conclude I was directed to lose no time in reaching my destination.

February 19th.—The Gongs of the Camp struck one as we crossed the low range of hills in or near of the encampment, the moon was bright and clear, and a strong north-east wind blowing which obliged us to muffle ourselves up, as well as we could. I had adopted nearly the same dress as the men who were with me, in order to escape being tormented by the Fakirs, Syeds and beggars, with which as I have before mentioned Sind abounds. I found this dress very convenient at Hyderabad as it enabled me to ride about, without being remarked in the least, and by that means I obtained much information.

Our road lay nearly north for the first mile, when we crossed over the low hills and passed between the tombs of Ghoolam Shah, and Abdul Nubbee, and shaped our course a little more eastward. After having gone about 6 miles through jungle, or what our guide said was an old Shikargah, we came to the banks of the Fulleli crossing the river which had about 3 feet water in it and was nearly 80 yards broad. We continued our route along the left bank for about 7 miles more, when we came to the village of 'Doosmun Boodanu'. The country was level and highly cultivated in the vicinity of the village, abundance of barley was growing in the fields—as it was broad day light I thought we might as well stop here and see that all was right, for the first march is always the most troublesome. There I remained until 2 p m. when we started, and after a march of 5 hours, which as the road was winding I do not consider more than 10 or 12 miles, we reached Jekera-ka-Gote. Two guides from Meer Moorad Ali Khan had joined us at Matiaree, their names were Quaemkhan and Belochekhan; and the instant the first person spoke I discovered by his voice that he was the gentleman who came with the pretented message from the Ameer, when I was about to start.

Matiaree which we passed was a large town and one of the prettiest places I had seen in Sind, it was surrounded with trees and gardens, and about $\frac{3}{4}$ of a mile from the Indus which afforded abundance of water for the fields; wheat, barley and indigo were the principal productions in the vicinity of

Matiaree, which contains a population of 3,000 souls the latter part of our route lay through Shikargahs, and jungle, and at the recommendation of our guides we put up for the night at Jekera-ka-Gote, which only contains 20 huts, and is badly off for water. Our direction was north-north-east.

The little water we could procure was brought from a deep water course about 2 miles from the village; there are several, but they were nearly all dry; to complete our misfortune, the only Bheesti we had (with his bullock) tumbled into one of them, and all hands were employed in getting them out again, it was too dark to attempt to get water so we went without.

During the night there were a number of suspicious looking fellows prowling about in some jungles near our little encampment but they did not come into it.

February 20th—Moved on 8 miles in the same direction to Salarrah, a village of 500 houses, 1,200 inhabitants, $\frac{1}{4}$ mile from the Indus. The road to this was through jungle and intersected by several deep water courses from Salarrah. A ride of one mile along the left bank of the Indus brought us to Gotanna, which is on the very edge of the river. It is here $1\frac{1}{2}$ miles broad. Current $1\frac{3}{4}$ per hour. There was a small island opposite to the place, crossed a very deep and broad water course which conveys water towards Meerpoor, 10 miles from Gotanna in the same direction, or if anything rather more east lies Halla or as it is called Halla Gunja—during the latter part of the march (which I conceive to be a distance in all 18 miles) we had a good deal of rain, and as the appearance of the weather was unfavourable I determined on stopping at Halla, which being a Peer's town I knew I should be well received—it was past 2 o'clock when we reached our ground, having been upwards of 6 hours on the road.

As I was sitting under a tree waiting until the camels were unladen, some well dressed people entered into conversation with me, and asked if we had come for the purpose of

visiting the celeberated Peer Mukdoom Nooh. I replied, no—that I was on my way to Khyrpoor, they recommended us to visit the Peer, and also the Musjeeds and Tombs of the place; as I was curious to find out whether the Peer would discover me, I proceeded to his house which was in the Town, surrounded by a pretty high wall the top of which was ornamented with the horns of the Katapacha (a species of deer). We were shown into a large oblong apartment, the sides and roof of which were beautifully carved and painted and the whole of the floor richly carpeted, giving the place an appearance of comfort far superior to the apartment of the Ameers. At the end of this room was a small square couch near which we seated ourselves. After waiting a short time, the Peer made his appearance. I was surprized to find him quite a young man of five and twenty years of age instead of veneral old gentleman with a white beard. His countenance was pleasing and manners particularly good. We rose on his entrance, and he advanced and gave us his hand to kiss. I atonce saw he had no idea of my being an European—he then requested we would be seated, and asked me who I was, I said "a soldier" in the service of the British Government, proceeding with letters to Meer Roostum Khan of Khyrpoor, he asked if I had Meer Moorad Ali's permission to which Quaem-khan our guide who was present replied, and said he was directed to show us the way, the Peer turned to me and said, "are there many of you Patans in the service of the Ferengees". I said yes—a great number. That there were however only thirty with the elchee at Hyderabad. He then asked a number of odd questions about the English-If they were good people, whether they ever prayed? If they were not very clever? and if it was true that they were all white? had white eyes, hair and bodies, if so said he they must be very ugly. I laughed at this part of his speech and gave the necessary replies to it as well as to his other questions. The Peer then enquired if it was true that the son of Shah Shujaol Moolk was with the English at Hyderabad, and whether they were not going to take Shikarpoor by surprize The Jemedar replied, that it was a foolish report, and quite false, that there was no such person with the Mission—and that as to the English taking Shikarpoor, that

they came as friends and were incapable of treachery—we shortly after took our leave—and I desired Quaemkhan to explain to the Peer that I was a Sahib (English gentleman) at which he was much amused and said.—"He is right, the Fakirs and beggars are very annoying to strangers, but I should not have thought he was a European—in the evening the Peer sent me presents of fruits, milk and sweetmeats at the same time begging me to remain a few days with him. I sent him a polite refusal and said that I was anxious to get on to Khayrpoor as soon as possible.

It rained all night and until 12 o'clock this day February 21st I was therefore compelled to remain until 2 p.m. to let the tents dry a little.

Halla is a large and populous town containing 4,000 inhabitants with a rich and extensive bazaar—part of a town belongs to the Peer, who is very polite and has great influence over the people. They are much better treated in Peer's village than in any other town in Sind and it often happens what when ill-treated by the Ameers, they take refuge in these towns where they become safe from all further prosecution. There is a handsome mosque and Dharamsalla north-west of the town; to the north-west of Halla, distant about one mile, are the ruins of the city of Khudabad, which I was informed was formerly the largest City in Sind next to Tatta; the ruins extend 7 miles but there are at present not more than 100 houses occupied. The tomb of Meer Fatteh Ali Khan stands on the southern extremity of the place.

February 21st 1832—Moved on 12 miles to a Syed's Tanda, the road led through a wild uncultivated country, and was winding, and a great part of it through thick jungle, passed a Fakeer's place; and the Tomb of Muri Baluche, who was assassinated by a Jumaille Beloche, continued our route 16 miles over a similar country to that already described, to a village called Khoorb or Limba-ka-Khomb a large though partly ruined village 300 houses, 900 inhabibants—there is a deep water course south of the village but it is suppiled with water from wells, of which there are 5 in this place. Rice is not

grown in this part of Sind—tobacco, jowarrey, barley, and wheat being the chief productions. It is necessary to take provisions here, as there are no supplies procurable until the traveller reaches Lalloo. The distance this day I conceive to be about 28 miles—we were $7\frac{1}{2}$ hours on the road and had some rain which increased the difficulties of our march.

February 22nd—Left Khomb early, intending to proceed to Kotree. On reaching Chir 8 miles, I was taken ill and obliged to halt not being able to sit on my horse from sickness and giddiness. I had barely time to pitch my bechoba when the rain commenced and continued during the whole night.

This village contains 100 houses, 2 shops, 350 inhabitants, it belongs partly to a Syed and is called Syed-ka-Chir.

On the 23rd February being anxious to proceed I left Chir early in the morning, though very week and ill, the rain had ceased but the roads were flooded and the camels and horses floundered and slipped at every step. I may here remark that the whole of the soil of Sind being of that description (a whitish clay) which does not easily absorb water. The roads, after a few days rain, became nearly impassable. We came to a deep water course which was quite full and impassable—so to avoid it, we were obliged to strike considerably to the eastward, and after wandering for $5\frac{1}{2}$ hours reached Nuwabshah-ja-Gote-having only advanced 5 miles on our way to Khyrpoor I was ill, wet through and perfectly disgusted—however about 3 o'clock the whether cleared up and the Jemadar having sent me a fine dish of 'pillaw' I became somewhat reconciled and determined to push on the next day to make up for our having been retarded. This village contains 3 shops, 100 houses, 400 inhabitants and is about 38 or 40 miles from the Indus.

February 24th—Left the before mentioned village and proceeded 3 miles to a village of 20 huts called Fakir-ka-Koh from thence to the Tomb of Baloo Jerdaree Beloch 13 miles—five miles further we came to another Tomb and extensive burial ground. The whole way was through a miserable desert, but in the last five miles there were the remains of village tombs,

water courses, and canals which were evidently cut in a different direction from those I had seen on my way, a circumstance which surprized me, the guides could tell me nothing regarding this curious circumstance, except that this part of this country was reported to have been populous. and flourishing, many years ago, and that a deep river ran through it. I felt much disappointed that I could not obtain further information on this head; I asked why the country was now abandoned, that the soil was as good as any I had seen in Sind, that it only required to be tilled. My guides replied that they did not know that the Ameers would not go to the expense of making water courses, and that no one else had money to do so, besides which the desert was infested with bhoots, gins (evil spirits) and robbers, and that we had better move on—a ride of 5 miles brought us to Kotree the road similar to that already described, we passed two spots enclosed with branches of trees. On enquiry I found they were the graves of two 'Cossids' who had been murdered about a year before—the march this day I conceive to be about 28 miles—we were 8 hours on the road but I attribute this to the difficulty the camels had in getting over the slippery ground, and we were obliged to keep with them in case of their being attacked, a circumstance which our guides said was not at all improbable.

Kotree is merely a collection of a few miserable sheds the village contains 40 people and has 3 or 4 brackish wells—there was little or no cultivation near the place and the inhabitants appeared miserably poor.

On my arrival as was always my custom I amused myself conversing with the people, the usual questions were asked as to where we were going, &c., and whether our masters the Feringees were white and like monkeys, if they eat mice and rats, to which I gave suitable replies, they did not appear to suspect me of being an European and were civil and obliging. As soon as they understood we would pay for all that we required, they brought us what they could spare though there was little or nothing procurable in the place. I asked many questions about out-road, and they were all ready to answer me, but no two men agreed on the distance of the villages from each other,

one would say 5, another 2, another 8 coss—in fact I found that they really had no idea of distance whatever—I do not believe that they intentionally tried to deceive me, but that they really have no idea of the number of coss between these villages—the same way with regard to the population and number of houses I seldom got any decided answer. They would say in reply to my question of, how many people there were in a village ? Oh ! two or three hundred. If I said that is very few, for so large a place. They would say " Oh! yes 4 or 5 hundred perhaps "—If I remarked that was a great many—they would say " Chungoo-Syn sut ut vees ahien" " Good man, there may be 60 or 80 people in the place. " I was therefore in most cases obliged to form my own idea of the population, and number of houses in each village, which I did not find difficult, when time permitted my walking through the villages we stopped at.

I was much indebted to my native costume for the quiet which I enjoyed. I passed without being noticed, or annoyed, whereas had I been dressed as an European, I should have been pestered, and gazed at all day, and have excited as great a degree of curosity, as the camel, leopard or boanassas would have, at a fair in England.

February 25th—A ride of 26 miles brought us to Laloo passing on the road a small village of Bindey a few huts and two wells. Laloo is much the same as Bindey but has one shop– the owner of which always keeps a large supply of grain by him, there are three wells at this place and it is 24 coss from the river. The territories of Meer Roostum Khan commence 3 miles previous to reaching Laloo.

About one mile from Laloo (north by west) is a ruined mud fort built by the Caloras, I visited it enpassant there is a large well inside, and the place might contain 300 people. It is now deserted, and the well partly filled up. The remains of a buffalo and some fire attracted our notice,—the guides said that the thieves had been feasting there and that it was a common rendevouz of theirs. The walls of the fort were composed of mud but with sticks placed through the walls horizontally at

different parts which gives a degree of consistency to this kind of building making it nearly as strong as stone. At 2 p.m. we proceeded on 12 miles to Chang passing a small village of one or two huts called Balochee ka Gote—the road was winding, and through jungle—Chang contains 40 houses, 100 inhabitants and supplied with water from wells one of which is pacca and 90 feet deep.

The whole extent of country between Nawabshah Gote and Chang, may be said to be a desert—the only inhabited villages being those I have mentioned, and I believe the people are only induced to remain, in consequence of this being the shortest route, and consequently more frequently travelled. At least during 5 or 6 months of the year, for in the hot season, there is no water here whatever, and I understand that the villages are then deserted, or nearly so. I have before said there is little or no cultivation round the villages, and the people appear to subsist by what they sell to travellers.

On the 26th February—I proceeded 23 miles to Khandearah—the first eight miles were through jungle, the remainder through a cultivated country the road winding—passed the small village of Pinjaree Daree at which place crossed a water course 18 feet deep 16 feet broad—it came from near Bukkur and is said to have cost one lac of rupees.

Khandearah is a small village of 100 houses, belongs to Meer Ali Murad, half brother of Meer Rustum Khan. It contains 400 inhabitants, 3 shops, and 4 wells. Shortly after my arrival I was informed that Diwan Dulpatrai and Lukhmichand had come to meet me and wished to see me. I sent for them and found that they had been waiting at Naushahrah for 15 days expecting (as they said) Colonel Pottinger,* that the

* NOTE:—I was much surprised several days after to find from Lukhmichand that Meer Rustum had not answered Colonel Pottinger's letters, fearing that by doing so, Meer Mooradali Khan would have obtained possession of the replies, Lukhmichand had however certainly been severel days at Nausharah, waiting Clonel Pottinger's arrival though how he could expect that gentleman to advance without an invitation, I am at a loss to conceive

Ameer (Meer Rustum) had written two pressing letters to Colonel Pottinger entreating him to visit Khairpoor. Lukhmichand appeared well informed of the nature and objects of the Mission, and said that the Ameer was ready to concede to us Kothees (factories) or anything else we might require.

I proposed starting for Khairpoor in the evening as it was only 18 coss but the Diwans said they had come nearly 30 coss, and had nothing up (meaning their baggage had not arrived) and begged I would remain until the next day which I agreed to.

February 27th—Having fallen in with Meer Rustum's people I thought it advisable to resume my English clothes—we left Khanderah and proceeded N. N. E. 7 miles to the small village of Butchral situated in a thick tamarisk, jungle, a low range of hills visible on the right of the road, distant about 8 or 9 miles which I am told run on to Roree—8 miles further in N. N. E. direction through a tamarisk jungle with small patches of cultivation brought me to Sodhi; I halted here to breakfast intending to proceed afterwards to Khairpoor. But my friends the Diwans had no idea of travelling, so fast, and insisted on my remaining where I was, the manner in which they endeavoured to prevent my going on, was truely laughable—first they tried flattery, and pretended that I was an envoy, and must travel leisurely or rather very slowly, finding this would not do; they then said that Meer Roostum had gone out hunting and it was no use my hastening on—but I could not be deceived. I had seen enough of the duplicity of the people of Sind to know that I could not trust them. So about 4 o'clock my friends the Diwans mounted their horses evidently with much regret, and moved off with me. A march of 12 or 15 miles through a low jungle, and where the road was very winding brought me to Chadoah; here I found several people drawn up to receive me and one, a Belochee named Yarkhan with the most serious manner imaginable, came and said he had just arrived from Khairpoor and that Meer Roostum had sent his compliments and begged I would remain where I was for a few days; I could not help laughing at this barefaced falsehood, which—as I found Lukhmichand had arrived I had no difficulty in understanding

as it was late and we had little to eat all day. I halted. Lukhmichand came to see me and I laughingly told him it was no use to attempt to deceive me, that I understood him perfectly; he at first appeared surprised but I soon explained to him that the inconsistencies of his speeches had convicted him. I then repeated them at which he laughed and said "Oh I am very tired. I have come all the way from Noushaharh hoping to get on quietly and you insist on going on so fast."

February 28th—This morning I found some people from Khyrpoor had arrived over night to conduct me to Meer Roostum Khan. The principal person was a young man called Inaet Ally Khan son of Fateh Mohomed Khan Goree—Meer Roostum's Prime Minister or wazzeer after some conversation, and his having presented me with some sweetmeats, &c. it was arranged that we should proceed at 11 o'clock. Inaetally Khan then left me, he had scarcely gone when two Syeds (Nujaf Shah and Lutaff Ali Shah) from Meer Ali Moorad Khan came with a letter for me. I found it was a complimentary sort of Epistle, in which Lieut. Burnes' name frequently occurred and stating that I was to be treated like he had been, and to make myself at home. I sent a reply saying I was much obliged by the kindness I had experienced from Mir Ali Moorad Khan and his people I was induced to do this at the earnest request of one of the Syeds named Nujjef Ally (Syed) Khan whose appearance and mysterious manner of speaking I much disliked.

NOTE.— I afterwards found that I was not wrong in the opinion I had formed of this man—he is a low caste Hindoostan Mussalman and not a Syed though he pretends to be one, insolent, cunning and mean doing everything however trivial in a mysterious manner—it was much against my will that I gave any reply to the letter—this man spoke of the manner in which his master had treated Lieutenant Burnes, of what presents he had made him, and even enumerated the number of dishes, of sweatmeats that had been sent to that officer I was disgusted with this gentleman who amongst other appointments holds the situation of Jamandar of Golundaze and was heartily glad when he went about 11 o'clock, the cavalcade which were to accompany me being all ready, we left Khanderah and reached Khairpoor by half past two, the road was winding and more sandy than usual, and over an

undulating plain which produced little or nothing but jungle. I was so pestered with my Sindian friends all the way that I had little time to make any observations, I think the road was more westerly than usual and the distance may be 15 or 16 miles.

On my arrival at Khayrpoor I found tents pitched for myself and party in a small Gurrey near the Town, and everything exceedingly comfortable—five different messages from Meer Roostum Khan came during the day to enquire if I had every thing I wished and to ask after Colonel Pottinger—Cooked dishes, sweetmeats and sherbut were furnished for the whole party and each man was supplied with a hooka (pipe) and charpye (bed).

February 29th, 1832—This morning Inaetally Khan came to pay me a visit and said that Meer Roostum would see me tomorrow, as he was sure I must be tired. Inaet Ally Khan then entered into an account of what had taken place between Meer Mubarruck and Colonel Pottinger at Hyderabad of which he said Meer Roostum was informed and that on hearing Colonel Pottinger had refused to treat with Meer Mubarruck had exclaimed : " This man is my heart "—" He is more than my brother to me "—Inaet Ally Khan then said that they Meer Roostum, &c., were ready to grant our requests and that Meer Roostum was most anxious to see Colonel Pottinger. In the course of the day dinner and sweetmeats were sent by Ali Moorad Khan (half brother to Meer Roostum) the person (Lootuf Ali Khan) who brought these things said that Meer Ali Moorad was a real friend to the English and had to thank Lieutenant Burnes for my present visit; I felt rather awkward at this speech not knowing how far I might displease Meer Roostum by accepting the supplies from Meer Ally Moorad, and having observed the jealousy of the Ameers at Hyderabad, was fearful of annoying Meer Roostum; however I sent my compliments to Meer Ali Moorad thanking him for his kindness, &c. In the evening however I took occasion to explain to Syed Rasul Shah (who had been directed by the Meer to remain with me) that I hoped Meer Roostum would not be annoyed at my having accepted Ally Moorad's supplies that I had no occasion for them—but I

could not insult him by not receiving them—The Syed said that Meer Roostum would not be annoyed, but recommended my sending back the supplies if they came in the evening. However before they arrived I ascertained that Meer Ali Moorad, possessed a very great portion of the Khayrpoor territory and also large sums in treasure, that he was well inclined towards giving us Kothees (Factories) in his territories, whether the others did or not. I thought therefore that I ought to be careful how I acted and when the supplies came in this evening accepted them as if it were a personal favour towards myself and had nothing to do with Government, I launched out in the praise of hunting, &c., of which I had heard that Ally Moorad was fond, and said I longed for the arrival of Colonel Pottinger, when I should be happy to see the Ameer shoot to which he had invited me. I concluded by saying that as Meer Ali Moorad was young man and of my own age,* I was sure I should like him very much. The Syed who brought the supplies said he would repeat all this to the Meer, and asked when I could visit him, I said I could not do so until Colonel Pottinger arrived but that, when that gentleman came, I would call on the Meer.

* NOTE.—This may be considered by an European as not quite respectful enough to one of Ali Moorad's rank but I found this sort of manner the most agreeable to the Sindians of all rank.

March 1st, 1832—This morning at 10 a.m. I proceeded to the Durbar accompanied by Alum Khan (a Balochee of rank though a perfect Dwarf) and Syed Rasul Shah, the streets of the town through which we passed were lined with people who salaamed, and called out Bhally Kurrye aya and other expressions of welcome as we passed along. The place where the Durbar is held is situated in the centre of the Town and is very similar in appearance to that at Hyderabad being an open verandah supported by wooden pillars. On arriving at the gate and doorway of the place I dismounted and proceeded towards the Durbar. Futteh Mohomed Khan Ghoree (Wuzzeer to Meer Roostum) having seized on my right hand and

Hussoo Wuzzeer to Meer Ali Moorad on my left. I was literally dragged by these two gentlemen through the crowd which was greater than at Hyderabad—On being ushered into the verandah, Meer Roostum welcomed me and begged me to sit down.

The Meer was surrounded by his relations, Ally Moorad being seated on his left hand, and Ali Akbar (Meer Roostum's second son) on his right. There were three sons of Meer Mubarruck Khan, and several other nephews, &c., distant relations of Meer Roostum Khan present. I delivered my letters to Meer Roostum, and mentioned that Colonel Pottinger only waited a reply to his communications, to advance to Khairpoor. Meer Roostum said he would see me again privately that this was a public Durbar to welcome me and that he hoped soon to welcome Colonel Pottinger also; he asked me a few questions regarding England to which I replied and shortly afterwards the Durbar broke up, and I came home. Meer Roostum Khan is a man of about 70 years of age, has a benevolent expression of countenance, agreeable manners and is much liked by his people. Ali Moorad Khan is about five and twenty being the youngest son of Meer Sohrab Khan (but by a different mother, than Meer Roostum's) Ali Moorad has a prepossessing countenance, is slightly marked with small pox and about middle stature. The sons of Meer Mubarruck Khan were all young men, and very good looking. Meer Ally Moorad I discovered became possessed of much treasure and a great portion of the Khairpoor territory in the following way. His father Meer Sohrab previous to his death having made over to him as youngest and favourite son a great portion of land; and directed his people to place his sons seals on a large quantity of treasure, the possession of this wealth has been accompanied by much uneasiness to Ally Moorad for it has occasioned constant disputes between him and Meer Mubarruck Khan and a decided battle between the two parties was about to take place, which the arrival of the Mission in Sind fortunately put a stop to. Ally Moorad's people made many professions of their and his attachment to the British and said that he was ready to give us Kothees in his own house or rather as they expressed it in his court yard

there were however constant allusions to what had been communicated to Lieutenant Burnes and the promises that gentleman had made, which puzzled me considerably, as I was unacquainted with what had passed between that gentleman and Meer Ally Moorad, whose name indeed is but once or twice mentioned or alluded to in Mr. Burne's memoir. I determined to act cautiously with regard to Ally Moorad and declined all invitations to visit him or go out hunting, &c., until such time as the Envoy should come.

March 2nd—About 10 o'clock this morning Meer Roostum Khan's replies to Colonel Pottinger's letter were brought by Wuzzeer Futteh Mohomed Khan Goree who entered into a long discussion regarding the objects of the Mission, and said that Meer Roostum would grant everything we could require provided a treaty was entered into (Nussel Dur Nussel) as had. he was told, been done at Hyderabad. He then asked me what had taken place at that Court, to which I replied that I was not at liberty to inform him and that as Colonel Pottinger was coming to Khayrpoor (as I understood Meer Roostum's letter contained a pressing invitation to that effect) he would himself inform them a good deal of conversation then passed and frequent allusions were made to Lieutenant Burnes and the requests that had been made to him which I was obliged to own I was totally ignorant of—when the Wuzzeer withdrew. I immediately occupied myself in writing to the Envoy and despatching the letters I had received.

March 3rd—This morning I had a second interview with Meer Roostum Khan and his family—the same persons were present as at the last, only the apartment where I was received was a more private one. Meer Roostum Khan asked a number of questions regarding England to which I gave suitable replies—he then said: "Havè you ever been in Espan"? I had much difficulty in finding out what he meant—at last discovered he meant "Spain".—I said yes, and answered some questions he put to me about the people of that country—he then said, what has Colonel Pottinger come to Sind for, I mentioned to him the objects of the Mission on which he

turned to his kinsmen and said " there you see," from which I conclude there had been some dispute amongst them —probably Meer Moorad Ally Khan's notion of our intended attack on Shikarpoor had been mentioned. Meer Roostum said to me, you have communicated with Futteh Mohomed Khan and know my sentiments, I have written to invite Colonel Pottinger to come and Inshalla (God willing) he will soon be here, make yourself at home and remain with us until he comes—The Durbar then broke up and I returned home.

March 5th—Received letters from the Envoy announcing his departure from Hyderabad—rode out in the evening and fixed on a spot for the encampment of the Mission—Coming back passed through the town which is larger and more populous than Hyderabad—it is built on a slight rising ground and is about $2\frac{1}{2}$ miles long by $1\frac{3}{4}$ broad exceedingly irregular in form and with streets if possible more filthy than those of Hyderabad. To the south and west, there is a deep water course which is called the Meer Wah; it was made by Meer Sohrab and conveys water towards Bejee ka Kote, and supplies all that part of the country. It was dry whilst we were at Khayrpoor. There was a brick bridge in very bad repair thrown over the water course; it stands about south east of the Town—I conceive the population of Khyrpoor to be 30,000—of all the castes 20r 3,000 are Hindoos. The Government is entirely in the hands of Meer Roostum Khan though the country I am told is divided off into 40 or 50 shares each member of the family having an allotted portion.

Monday, March 6th—This day being the 'Eade' (Mahomedan festival of sacrifice) Meer Roostum sent me a present of 200 rupees, which he begged I would accept—I said I was sorry I could not do so that he was already too kind in insiting on sending me a daily supply of food and that I really could not accept the money. Syed Rasul Shah who brought the money and with whom I had become better acquainted than any of the other people, begged me to accept something, or that the Meer would be offended. I said very well give my respects to Meer Roostum and say that I am gratified by his kindness but that I beg he will permit me to accept instead

of the money the charpye (bed) I am now sitting on—this was a common Bedstead of no value—but the circumstance evidently pleased the old Syed, who gave a quotation in Persian signifying that a gift however trifling from the hands of a friend was of more value than riches or wealth, or rather that it was invaluable. I begged he would inform Meer Roostum those were my sentiments, and that I should keep the charpye as a rememberance of the kindness I had received from him and his people. After this speech my tent was daily crowded with visitors—Balochees, Syeds and all sorts of people. I soon discovered that they were all fond of drinking and having a small supply of wine, beer and brandy with me, I found a glass of either to be a most acceptable present—the Balochees are certainly a most dissipated set of fellows—indeed I may say of Khyrpoor that the whole population are the same from Meer Roostum downwards—the old gentleman I was told was seldom sober from 10 o'clock until 4 in the evening when the Durbar is held. He sent to me for some wine as did also Ali Moorad, and the Wuzzeer Futteh Mohomed, I complied with their requests as far as I could—and in doing so evidently gained their good will.

March 7th—I began to get tired of remaining quiet; and not feeling over well sent for Futteh Mohomed and said I should like to go and meet Colonel Pottinger, and the other gentlemen of the Mission, the Wuzzeer said that he would communicate my desires to the Meer, which he did, and I received a polite message, saying that the country was mine, and I begged I would go where I pleased. That men had been appointed to attend on me, but that if I wanted amusement or exercise, dogs, horses, hawks, &c., were at my command whenever I chose to send for them. I received much civility from the people at Khyrpoor, and had constantly visitors at my tent, amongst these the old Syed Rasul Shah was by far the most intelligent and gentlemanly, he made many professions of friendship to me and I believe was sincere which is a very unusual circumstance in Sind.

March 8th—In making the request to go and meet the Envoy I had another object in view than my own amusement.

I found it difficult to collect any information regarding the country and I feared my map would be but a small one, by moving along the banks of the river much important information was to be gained, and I therefore determined on proceeding in that direction. It rained heavily this day and was remarkably cold. My friend Syed Rasul Shah paid me a visit and announced the arrival of Meer Mubarruck Khan at Khyrpoor; I ought to mention that he was not present at any of the Durbars being as I was informed outshooting or hunting.—Jealousy or dislike of Meer Ali Moorad was the real cause of his absence and probably the feeling is mutual, for no sooner did Meer Mubarruck arrive, than Ali Moorad departed for the purpose of hunting. (It was said) Meer Roostum Khan endeavoured to conceal the differences which constantly occur between Meers Mubarruck and Ali Moorad but with little effect.

I understood their present quarrel which has lasted for some time, is in consequence of some land which Ali Moorad had in his childhood made over to Meer Mubarruck, but now wishes to resume, on the plea that he was a child at the time he made the arrangement with Meer Mubarruck and consequently the grant is not legal. Meer Mubarruck refused to give back the land; Meer Roostum either cannot or will not interfere so that the parties "de tems en tems" settle their differences by a little private fighting.

Meer Mubarruck Khan has the character of being a cunning and deceitful person, vain, and is cruel; he is much disliked by the people, particularly the Hindoos. Meer Ali Moorad is by no means a favourite—his ruling passion seems to be avarice—which of all others the Balochees are most likely to despise.

Meer Roostum Khan is by far the most popular character in the country; he is humane, just and benevolent and the only fault which is attributed to him is that of indulging in intoxicating beverages such as bhang, opium, &c, this circumstance throws him much into the hands of Wuzzeer Futteh Mohomed Khan Goree, who in fact conducts nearly all the

business of the State. He (the Wuzzeer) is in his own way a shrewd clever man and is much attached to Meer Roostum Khan, but the Wuzzeer being a stranger (originally from Marwar) he is not so great a favourite as he otherwise would be. Of the youngest branches of this family there are four sons of Meer Roostum Khan, three of Meer Mubarruck, two of Ali Moorad.

I am told that Meer Roostum had publicly acknowledged his eldest son—Meer Mohomed Hassan as his successor. I only saw this person once—he appears to be 38 or 40 years of age and is said to be much liked by the people.

The second son of Meer Roostum is Meer Ali Akbar a stout young man of five and twenty resembling somewhat Meer Nuseer Khan of Hyderabad. I saw him frequently—he appears good natured but is vain and not over burthened with sense.

The third son Meer Sher Mohomed a young man about 20 years of age whom I never had any opportunity of conversing with.

The fourth son Meer Ghulam has the misfortune of being born an idiot, he is about 18 years of age—Meer Mubarruck's sons are Meer. Nuseer Khan, Meer Aliyar Khan and Meer Fazul Mohomed.

The first is the favourite of the father, and is far more popular with the people than any of the sons of Meer Roostum Khan. Nuseer Khan is very handsome and is said to excel in all military exercises.

Meer Aliyar Khan is a pleasant and gentlemanly young man, appears well informed and affable, he is the son-in-law as well as the nephew of Meer Roostum Khan.

Fazul Mohomed I never had an opportunity of conversing with, he does not appear to be very popular.

The sons of Meer Ali Moorad are both children.

There are two other relatives of Meer Roostum Khan's whom I have omitted to mention in their proper places—these are Meers Chakur and Zungey, the former is the brother of Meers Sohrab Khan and consequently uncle to Meer Roostum; Meer Chakur has a small portion of land near Peer Mohomed Raschid ka Tandah, and seldom visits Khyrpoor, he is at least 70 years of age and has no family—Meer Zungey is related to Meer Rootum Khan but I do not know in what degree; he is also an old man and seldom visits Khyrpoor.

March the 9th and 10th—I was favoured these days with many visitors probably owing to the brandy I had distributed and amongst others the Wukeel of Bawul Khan came, he was a Hindoo named Askerun; and appeared to be as cunning as most of that class are—but with all the pride and insolence of the Mohamedans. In the evening I gave a 'nautch' which was attended by most of my visitors. Inaetali Khan had obtained his father's permission to come and appeared delighted. It was a laughable scene to observe my visitors smoking cheroots and drinking raw spirits, which seemed to have no effect whatever on them, though it is probable that these were things they never could have indulged in before.

March 11th—Left Khyrpoor at half past eleven o'clock a.m. and proceeded in a south-west direction through a country covered with thick jungle passed through some Shikargahs belonging to Meer Zungey, the village of Meetee and several Baluch waunds (temporary villages) and arrived at Ahmedpoor, a village belonging nominally to Ali Akbar contains 200 houses, 5 or 6 shops and is supplied with water from four wells and a small water-course. I was five hours on the road, but as it was very winding and I halted some time at Meetee I do not think the distance more than 14 miles.

March 12th—At half past ten a.m. left Ahmedpoor and proceeded about 3 miles, came to a broad sheet of water (which I was told was a branch of the Indus, that came from the village of Mohomed Rasheed Pir the direction to it was west from Ahmedpoor, on arriving here I turned south and proceeded to Palleja and from thence to Bardera, a pretty village

belonging to Ali Moorad and situated on the banks of the Indus. The branch of the Indus I had come along, here joins the main stream. The whole of the road was through cotton cultivation except within 3 miles of Bardera, where it was jungle. The distance may be 12 miles. I had hoped to have escaped the Meer's hospitality but found that a person from Meer Roostum and one from Ali Moorad Khan had arrived to attend me whenever I chose to go. The former was an old man named Mian Wyyad Bakhsh, and the latter a Belochee called Fazul Mohomed, I was sorry they had joined me and I knew the villagers would suffer which indeed was the case. The Belochees on occasions of this kind take what supplies they require from the villagers who are very inadequately paid, if not paid at all; the latter occurs far more frequently than the former. It was in vain I protested I would not receive any supplies; they declared that the Meer would consider it the greatest insult unless I did; however I managed to reduce the supplies to a sheep a day and grass only for the horses. The village of Bardera contains 250 houses, 6 shops and is supplied with water from the Indus—in the evening the Jemedar and I went out fishing and remained out until it was nearly dark—I was much surprised by the continual changes that took place on the banks of the river. Near the place where we were fishing, there was a projecting bank which decreased full three yards, during the two hours we observed it, but it must be remembered that the whole body of the stream struck more forcibly on this bank, as it was just at the end of the branch I had followed so that the water from the main stream caused a strong eddy and current. The falling in of the banks is however to be seen in all parts of the Indus, and as long as the soil continues to be what it now is—must be so; for it offers little, or no resistance, to the current. The river was a good mile in breadth, and the current about 2 miles per hour.

March 13th—Started at 11 a.m. for Razekadera, the road winding and direction S.S.W. nearly--during the first three miles the road lay through fields of cultivation, to the village of Moojer from thence rather more westernly 5 miles to what was described as Razedera and as being a large town. I was

much surprised when on coming to 3 huts my Sindian friends said "here is the Mukkaum" halting place I saw my old friend had lost his way, and therefore asked a man of the place what the place was, he told me it was a "Puttun" or Ferry, and that Razedera was distant about 3 miles due east, we turned our horses' heads in that direction, soon reached the village and encamped. The whole of the last 8 miles was through thick jungle.

Razedera belongs to Ali Moorad it is supplied with water from the Indus, a deep and broad water-course being cut from that river. The village contains 200 houses and 4 shops, the population 750.

March 14th—Understood from Mian Wayed Bakhsh that the Envoy would be here on the 16th so despatched a letter to him reporting my being at Razedera.

March 15th—I had been out fishing all the morning, returning to dine I found, that the Envoy was at a village called Muggee, said to be ten miles off. After having dined I mounted my horse and proceeded to Muggee which from the road being winding and narrow, was certainly good 15 miles. On arriving at the village I found the people with the overland party, but they had no intelligence of the Envoy. I had scarcely seated myself and ordered my horse to be cleaned when the Syed (that I disliked so much and whom I had met at Kanderah) Najif Ali Shah came up, and said in a most mysterious manner, that he had a letter from his master Ali Moorad, for me and also one for Colonel Pottinger which I was to deliver. I was much annoyed with the low cunning of this fellow, but determined he should not be able to make up any stories regarding his transactions with me. I therefore said to him "sit down you need not be alarmed or mysterious—we are all friends here; (there were about 20 of the auxiliary horse round me and a number of sepoys). I then took the letter which he said was for me, but declined having anything to do with the other. I said Colonel Pottinger is always ready te receive any letters, or persons publicly and you can give it to him yourself—the Syed appeared disgusted at his failure in establishing

himself as an important character, for I believe all the mystery and cunning he displayed was merely to gratify his vanity- by inducing the Belochees and the Sindians, to believe he was a person of great importance and trust. He was evidently much out of temper at his reception, and I was delighted at having annoyed him. About 7 o' clock a man came in and said that the Envoy was at Chandeka Gote which he believed to be 8 miles off in a westerly direction but that the road was bad and very swampy. I immediately ordered my horse and as it was a fine moonlight night we managed to get through the jungle pretty quickly. Crossed the dry bed of a branch of the Indus which was 3/4 mile broad—in this we saw some enormous wild hog that had come down probably to drink for there were pools of water here and there. Three miles from the branch of the Indus we came to the Indus itself, opposite to Chendeka Gote, when having fortunately found a small boat in the river, I crossed and had the pleasure of joining the party about 10 o' clock.

16th—I continued with the party, as the Envoy had decided to disembark at Razedera or rather at the Ferry there. We reached it in the evening and sent off some of our things, pursuing the same road as I have described a few pages back we reached Razedera, at which place we remained until Monday, the 19th, during which time little or nothing occurred. On Monday we went on as far as Laloo, about 11 miles, the whole way through thick jungle.—Laloo is a miserable collection of huts. Direction N.-E., nearly.

Tuesday, 20th—Continued our route towards Khyrpoor, passing another small village called Laloo, of the same size as the last, we then came to a very pretty village called Sheikh Mahi near which and to the westward was a deep and broad river bed, we were informed that 50 years ago the Indus ran here, and that during the floods it did so even now. This makes the breadth of the river at that period something very great—I should think nearly 9 miles at this point. Continued our route passing the ruins of a very extensive village, one small one and arrived at Ahmedpoor the last 2 miles was through cultivation—the whole distance may be 13 miles—but the road is

very winding which makes a great diffirence, the distance in a straight line does not exceed 10 miles. This is not the Ahmedpoor I went to, that being away to the westward some distance.

March 21st—We left Ahmedpoor, to which place I should observe Wuzzeer Futteh Mohomed Khan and a number of other people of rank had come to meet the Envoy and we all left together on our way to the Capital. The Wuzzeer had hawks with him and we tried them going along, but it was stupid work, there being such crowds of people shouting and making a noise that the birds got alarmed, the distance from Ahmedpoor to Khyrpoor may be about 6 miles. The road was a plain, studded with jungle and covered with little mounds, or hillocks of sand; our encamping ground was N.N.E. of the city on a fine plain supplied with water from wells. As usual the camp was thronged with Syeds, fakirs and beggars of all description. A new set of beggars assailed us here calling themselves Syedanees or female descendants of the prophet; this new body of paupers is very numerous and each party we saw this day mustered at least 15 or 16 women whose whining and shrill voices were if anything more disagreeable than the loud and sonorous calls of the men.

Our encampment as I have before mentioned was N.N.E. of the town; in our rear distant about 8 miles was the low range of hills already spoken of. In front distant about 12 miles the Indus. To our right, distant 15 miles the town of Roree, and on our left about $\frac{1}{2}$ a mile was the town of Khyrpoor.

The situation of the town itself is low, I understand that during the floods the water comes nearly up to it. On one occasion in 1826 the streets were actually flooded. Two deep water-courses, one running nearly south and the other east prevent in a great measure, the waters overflowing the town during the rainy season, were it not for these water-courses, the place would be annually inundated.

April 1st, 1832—I have kept no regular journal during the last few days, our visits to Meer Rustum Khan, being similar to those described as having taken place at Hyderabad; the only

change that has taken place is in the conduct of the Wuzzeer, and Dewans, who shew an evident disinclination to come to business.

Futteh Mohomed Khan Goree, the Minister, puts off from day to day making the necessary arrangements for concluding the treaty, which he at first appeared so anxious about.

April 4th—I had an interview with Ali Moorad Khan this evening after "l' embrassade" and having welcomed me, he commenced speaking of his people, and hoped they had treated me well; I thought this a good opportunity to tell him that his servant Syed Nujeeff Ali was acting in a manner which was not creditable to his master and explained that he, the Syed, did everything with an heir of mystery and secrecy, that there was no occasion for and that in itself was ridiculous, that Colonel Pottinger would not receive any communications whatever secretly and that if Ali Moorad had anything to communicate, it must be done openly. Ali Moorad appeared surprized at what I told him and said "Inshala" tomorrow Colonel Pottinger shall have proof of my sincerity and friendship. The conversation then turned on hunting and shooting and after having been with him about an hour I returned to camp.

April 9th—I find the speech of Ali Moorad Khan was like all the other Sindian ones a regular 'Gasconade.' So far from the Syed taking my advice for I spoke to him as well as to his master I find that he came into camp last night at 12 o' clock and wished to have an interview with the Envoy as he had brought some letters, and presents; he was informed that the hour was not a proper one, and had the mortification to retire without having seen the Envoy.

Our business at Khyrpoor is at length concluded. Our Khyrpoor friends who made such professions and promises have acknowledged that Meer Moorad Ali Khan was perfectly right in calling them his servants and slaves the only treaty they will enter into is a similar one to that which Meer Moorad Ali gives us.

It is difficult indeed, almost impossible to conceive, why this should have been disguised, or what purpose such a line of conduct was adopted to carry—I think it not improbable that Meer Rustum if left to himself would have willingly entered into any description of treaty, but influenced by Meer Moobaruck Khan he was induced to act as he had done..

There can be no doubt that Meer Moobaruck Khan was pursuaded or ordered by the Hyderabad Court to induce his brother to act as he has done; the state of mind, and body, in which Meer Rustum Khan was, rendered him an easy object to alarm and Meer Moobaruck carried his point.

It would be tedious to enumerate the trouble and anxiety the Envoy underwent from the ignorance and suspicious nature of the people here and also at Hyderabad—the most common phrase appeared to them to have a concealed object and circumstances of the most trivial nature, excited their suspicions. In fact I can say very little in favour of their dipositions, or character, they are one and all liars and reminded me not a little of my old acquaintances—Les Gascons except that the Sindians possessed none of the acuteness, or good qualities of those people. I was heartily glad to hear that the 10th of April was fixed for our departure from Khyrpoor and longed to be far from the territories of Meer Rustum.

We left Meer Rustum's capital at half past 5 a.m. and arrived at Allybang by half past 9 a.m. the road was winding and direction nearly north. We passed through some cultivation but the greater part of the way was through Shikargahs and date jungle. The latter is very abundant in this part of Sind, the distance I conceive to be about 14 miles. Our encampment at Allybang was on the bank of the river from which the Fort of Bukkur was visible in the distance a sketch of the opposite bank accompanied the map. The Wuzzeer, his son Inaet Ally Khan, and several other Sindians amongst whom was my old friend Syed Rasul Bakhsh Shah, accompanied us to the river, and I must say that I believe the Syed was really sorry to see us go away. The respectable old man had from the first fully appreciated the European character, and I believe was much attached to us. He had been a

sincere friend to me from the commencement and before parting we exchanged swords. The sword I gave was a pretty Khorasan blade which I had purchased at Hyderabad, but strange to say the one I received in return was a real solingen—how it found its way into my friend's hands, I could not discover.

April 12th—We embarked yesterday evening in the boats allotted to us—by giving Meer Ali Moorad a brace of pistols which he took a fancy to, I obtained from him the use of his Jumptee, or state Barge as far as Hyderabad, which was rather a fortunate circumstance, as we were much better off in it, than in the common boats—the state Barge or Jumptee was 96 feet long and had two cabins with curtains to them, in which Morris and myself made ourselves very comfortable. The Jumptee is capable of containing 100 men for a voyage of several days but 150 might cross the river in it—the other boats were of different sizes from 20 to 60 kurars burthen; the kurar being equal to about 3 kundies. There is no want of boats on the Indus, and I have no hesitation in saying that 2,000 boats large and small could be collected between Roree and sea—a man of Hyderabad told me that with three days' warning he could procure 400 boats.

By sunset this evening we had reached Chande ka Gote the distance of about 56 miles, the villages we passed are laid down in the map, but the rapidity with which we proceeded barely allowed me time to note them down. The river is truly magnificent, its breadths in some places being 2 or 3 miles, and scarcely even less than one mile broad—the banks are generally covered with trees, and the numerous boats of the fishermen, or those crossing at ferry render the scene a very pretty one. The depth of the river from the Boatsmen's account never was less than three fathoms, the current ran at the rate of about $3\frac{1}{2}$ and sometimes in the bends, and turns of the river upwards of 4 miles per hour, so that there was little to do but to keep the boat in the stream, and thus we floated down, sometimes going sideways, and at others stern foremost. The boats were managed with great ease by a long oar fixed at the stern of the boat, and the way it was used resembled what sailors call

"sculling." The whole of the boats on the Indus are flat and those of the largest size when laden draw about 4 feet water.

Sunset April 13th, 1832—We left Chande ka Gote about 4 p.m. and have just arrived at Rukan, the distance about 61 miles. Our voyage was similar to that of yesterday—the river and appearance of the country much the same, we took leave of our Mehmandar at Meetanee, where Meer Rustum's territories end, but had scarcely fixed ourselves for the night, when I heard that my tormentor, Syed Nujif Ally Shah, had arrived, however I did not see him—that being a pleasure reserved for the 14th.

April 14th, 1832—About 7 this morning, after leaving Rukan a boat came alongside of the Jumptee, and out stepped Nujif Ally Shah, and Lorotuf Ally Khan, both servants of Meer Ali Moorad they were bearers of a letter to me, with a request that I would deliver some letters which the Syed had, to Colonel Pottinger. Nujif Ally was as usual particularly mysterious, and said that the letters for Colonel Pottinger must be delivered secretly; on which I told him that I would have nothing to do with the business, and that if he chose to go openly to the Envoy, he could do so—I at the same time wrote a note to the Colonel who was in another Jumptee, mentioning the arrival of Syed, and his proposal. The Envoy replied that we were now out of Meer Rustum's territories, and that he would receive no secret or private communications from any of Ali Moorad's people. The two letter bearers on receipt of this piece of intelligence vented their rage on each other, and much to my satisfaction went off. I was perfectly delighted to see my tormentor, nearly suffocated with rage. The last words of poor Lootuf Ally who was a little mean-looking fellow, with a squeaking voice, were expressive of the misery they would endure, in being tracked up the river to Peer Mohomed Rashid Ka Tandah. By 12 o'clock this day we reached Sehwan 50 miles, when Dr. Sinclair, Lieutentant Pottinger, Mr. Scott, Lieutentant. Morris and myself prepared to visit the temple of Lal Shahbaz, and the ruined fort which Lieutenant Burns mentions in his memoir—we procured a small fishing boat and went up the Arul to Sehwan, which was about 3 miles distant from our anchorage. The

water of the Arul was beautifully clear, and sweet, very unlike the muddy stream of the classic Indus. We landed about ¼ of a mile from the town and proceeded in the direction of some ruins which we supposed to be the Fort. These ruins are about 1 mile south-east of the town of Sehwan, however when we arrived we found that what we had supposed to be the fort built by Alexander the Great, was merely an ancient Edgah. We were all much disappointed, and turned our steps towards the town; but before reaching it we fell in with two Sindians who offered to show us the Fort built by the Kaffar (infidel) as they called Alexander the Great, and we readily followed them to the top of a mount in rear of the town. The mound is in shape an irregular oblong, is about 80 paces high and may be 1,500 feet long, by 800 feet broad. These were the remains of several Towers and walls and the entrance or gateway was in pretty tolerable repair. The interior of the mound had apparently formerly been hollow, but was nearly filled up with rubbish and wherever there were any deep holes the remains of solid masonary were visible. Our conductors told us that when it rained heavily that the earth being washed away, coins and other curiosities such as medals, &c., of ancient times were found about this place, and that Lieutenant Burns had bought several; however, we could procure none. From the castle we proceeded through a tolerably long street to the temple of Lal Shahbaz a celebrated saint—the history of whose miracles would fill several volumes—the entrance to the temple, was through a narrow lane—and we had hoped to have escaped being crowded and annoyed, by the preople as we had scarcely seen any one but our two conductors during the walk to the castle. The whole population were however in waiting for us at the temple and when we reached the narrow lane before mentioned there was a shouting and roaring created by an assemblage of Syeds, fakirs and beggars of all descriptions which was enough to deafen us all, however we walked straight up to them and entered the tomb, leaving our shoes in the court-yard. A Parsee had accompanied us with some money as a present to the poor of the place, also to the Peers. It was from ostentation I suppose that he chose to carry the bag which contained the money under his arm—he had scarcely commenced untying the bag to distribute the money when he

was set upon by upwards of hundreds of these vultures, and would have been quickly in the state of perfect nudity, had it not been for the interference of William Pottinger who happened to see the transaction, and who with much difficulty extricated him from his perilous situation.—The tomb of Lal Shahbaz does not merit any description. It is similar to the common Peers' places which may be seen in all parts of India. The town of Sehwan is a dirty place and I should think that Syeds, fakirs and beggars included—it may contain about 5,000 inhabitants—we reached our boat soon after leaving the temple, and arrived at the Jumptee in time for dinner, quite tired, and somewhat disappointed with our trip.

The right bank of Indus at Sehwan is rocky and the hills which are of considerable height run close down to the waters edge—these hills run out of the range called the Berhoohee mountains which separate Sind from Baluchistan. The country on this bank of the Indus from Sehwan to the sea is much of the same nature as that in the vicinity of Sehwan being sandy and unproductive, and in which there is little or no cultivation except in the immediate vicinity of the river.

15th—Leaving Sehwan we proceeded as far as Halla, or rather reached that part of the river which is opposite Halla, the town itself being 2 or 3 coss distant. We had a strong wind from the south-west which towards evening increased to a gale. The river between Halla and Sehwan is similar to the other parts in breadth and depth the left bank is in all parts of the river level and covered with Shikargahs or cultivation, we passed several large villages all of which are laid down in the map—their size and population being described in the route book.

16th—I left Halla at half past six expecting to reach Hyderabad by 12 o'clock, but the wind increased to that degree, that it became impossible to make way against it. By 12 o'clock my boat had reached the mouth of the Fulleli and here, as the weather was so unfavourable the boatmen recommended we should remain. I endeavoured to get a boat to take me down to the Fulleli to Hyderabad, but owing to the sand bank which runs across the mouth of the river, but little water had

as yet entered into it, and it was not navigable. The description of this river as also the other branches of the Indus has been given in the memoir. It blew a perfect gale of wind during the whole night.

On the 17th we reached the landing place opposite Hyderabad, and got our tents pitched near a garden belonging to the wives of the late Meer Kurrum Ali.

20th—Took up our old encamping ground near Hyderabad.

Sunday, 22nd.—This day we paid our last visit to Meer Moorad Ali Khan, our reception was a kind one and the Ameer evidently by his manner showed how much confidence he placed in the Envoy. The Shikarpoor reports which had so much alarmed him, having been proved to be false, contributed in no small degree to his forming his present good opinion On the 25th we moved down to the river.

28th—Left Hyderabad in boats and reached Bunna near which the Pinyaree Branch strikes off. Previous to arriving at Bunna we passed the town of Jirkh, and saw the remains of some pacca buildings near the water's edge, some of them in the water, I had no time to land and examine the vicinity of this place but it struck me as being possible that this may have been one of the points where Alexander erected a town.

About 12 o'clock on the 30th April we reached the landing place at Tatta which is about 33 miles by the river from Bunna the right bank of the river from Jirkh nearly to Tatta is hilly and stony the hills are not very high but run in close on the river, in some places and at one part in particular near a Peer's place there is a small hill on which was a fort erected it would entirely command the river. In the evening Dr. Sinclair and myself rode to Tatta which is nearly 3 miles from the river and due west of it. The place has fallen greatly to decay and is no longer the rich city it formerly was—the manufactures of Loongees for which Tatta is celebrated have now almost ceased to exist, no Loongees are made without an express order from Government. We saw the house occupied formerly by Mr. Crowe but it (like most of the buildings in Tatta) was in

bad repair—it appeared to be occupied by some Sindian, so we did not enter it. Tatta is altogether a melancholy looking place, affording little or nothing worth seeing and we returned to our boats much disappointed. There are a number of gardens in the vicinity of the place which produce great quantities of apples—they are small but have a good flavour. They were selling at 400 for the rupee. I should not conceive the population of Tatta exceeds 7,000 souls—at the present time a great falling off from what this place was even in the time of Mr. Crowe.

May 2nd—We left Tatta nearly this morning and proceeded 6 miles when we passed the mouth of the Baghar. The branch of the river we proceeded by from the above, is called the Sitah, and appears to have existed for about 12 years previous to which period the Baghar was the principal branch of the Indus. The Sitah is now as broad and as deep as any other part of the Indus but the Baghar is nearly dried up. By 12 o' clock we reached the small village of Ooplanna where we disembarked.

May 6th—We arrived at Muggerbhee or as it is also called Bhee this morning. Our road to it from Ooplanna does not deserve any description, it being over a level country studded with tamarisk and here and there with rice cultivation, a distance of about 20 miles by the road, though much less in a straight line. The whole of this part of the country is flooded during four months of the year. We passed several small villages in the road none of these containing more than 40 or 50 huts.

Muggerbhee is a tolerably large place and I should think it may contain about 3,000 inhabitants. The town is situated on the left bank of Goongroo river, which is here about 200 yards broad and said to be two and a half fathoms deep. About 1 mile and a half from Muggerbhee in a southerly direction there is a bund thrown across the Goongroo river; the reason assigned for this bund having been built is, that the river water at Muggerbhee became salt during the flood tides, in consequence of the salt water joining the Goongroo by the creek now called the Seer Baree. By this creek or Karee

goods are brought up from the sea (at high tides) to the bund before mentioned; and are from thence conveyed to the Goongroo and Penyaree branches to the interior of Sind. This facility of navigation gives Muggerbhee a great advantage over most of the towns of Sind, and when it is considered that most of the commerce is carried on between Cutch and Sind is *via* Muggerbhee it appears surprizing that the place is so small as it is. The Goongroo river as well as Penyaree, and the extensive march called Manjur, have been described in my memoir on Sind. There were 25 boats at this place the largest were of 25 Karars burthen, and the smallest of 4. The Goongroo like all the rivers in Sind abounds in fish.

We were told that at Muggerbhee there were 10,000 female camels and in one drove which we saw there were atleast 1,200.

The situation of Muggerbhee is a very peculiar one, and should it ever become necessary to invade Sind, I should strongly recommend its being entered by Muggerbhee. Boats could easily sail up the Seer Baree, to the bund, or at any rate as far as Juttka shir, which is about 15 miles from the bund, here the troops could disembark and a short march would bring them into a country where supplies, and fresh water are abundant. It is not to be supposed that such a movement would be unresisted by the Sindians, and probably the first step with them would be to remove the supplies of grain into the interior. The grass and water of which there is abundance could not however be thus disposed of and grain for a few days would be procurable from our own bazars.

The advance from Muggerbhee to Hyderabad might either be performed by land, or water, the latter affording an easy and cheep way of transporting heavy baggage.

The treaty which has just been concluded with Sind will I think materially affect Muggerbhee, and render it of much greater importance than it now is, the facility of reaching it from the sea by the Seer Baree which is only a voyage of three days at the most, and it can be made in two if the wind is favourable, is a circumstance which must be of much importance to the trader. The voyage from Muggerbhee to

Hyderabad can I understand be performed in 5 days, with ease, so that 8 days would be the period required for reaching the capital of Sind by this way; whereas *via* Tatta, and the main stream of the Indus the voyage could scarcely be performed under 10 or 12 days perhaps 15; and if I am rightly informed in the navigation of the Wunneyance there is a strong current to contend with; all this fairly considered leads me to recommend the voyage to Muggerbhee as more expenditious, safe and easy than that *via* Tatta.

May 8th —A ride of about 11 miles in a south-east direction and alternately through cultivation and jungle brought us to Bhoor, the village which I have mentioned as being our halting place on the 15th or 16th January we encamped on the edge of a marsh some distance from Bhoor this marsh was formed from three large water-courses about 2 miles off called Cajeera ka Dhund, and which were supplied from Muggerbhee. The country was beginning to feel the effect of the rising of the river, and I was told by the fishermen at Cajeera ka Dhund, that in a course of 15 or 20 days the greater part of the country would be under water, and that they then retired nearly as far inland as Roree. The difficulty of procuring water between Bhoor and Kotri induced the Envoy to make one march of it from Bhoor to Lukhpat, we therefore started on the evening of the 10th at 4 p.m. and marching all night reached Lukhput bunder on the 11th about 11 a.m. by the route which has been described in the commencement of this journal, as also in my route book and as the Mission has now reached our own territory, I bring my journal to a conclusion. My memoir contains such information on Sind as I have been able to collect. In the route book and map, the situation, size, resources and population of the towns and the villages have been laid down and in conclusion I can only hope that I have fulfilled as far as it has been in my power the important duties of the situation conferred on me at the recommendation of the Envoy to whom for his kindness towards me on this as on many former occasions I shall ever feel grateful.

(Sd.) EDWARD DELHOSTE,
Lieutenant and Surveyor to the Sind Mission.

Selections from the Records of the Commissioner in Sind.

SELECTION No. VI.

An account of certain details of administration and development in Sind, relating to the pre-conquest period.

NO. 124 OF 1836.

POLITICAL DEPARTMENT.

ON THE INDUS (BELOW TATTA).

Dated 10th December 1836.

SIR,

My letters Nos. 115 and 119 of the 25th and 30th ultimo to your address will have made the Right Honourable the Governor-General of India in Council acquainted with the successful termination of my negotiation in Sind, and as I am now on my return to Kutch, I propose in the present despatch to lay the detail of my proceedings before His Lordship in Council, together with any observations and suggestions, that strike me as likely to be interesting, or to be expected of me.

2. I had an intention at one time of reporting separately on what I shall distinguish by the Commercial and Political subjects of my Mission, but the discussion of those topics became, specially latterly, so interwoven with each other, that I now see it would be impossible, without much repetition, to adhere to that intention, and I think one general report will be more perspicuous, and therefore, I hope more satisfactory to His Lordship in Council.

3. On arriving at Vikkur, I found two of the Ameers' state boats (Jumptees) had been waiting for me there several days, in charge of Mahomed Abid, the Kardar, or Governor and Ex-officio Nawab of Tatta and Hyder Khan Laghari, the Governor of Mugrubeen and Jatee or South-Eastern Districts. The former is the servant of Noor Mahomed Khan, and the latter of Mir Meer Mahomed and from their local jurisdictions they are the most influential men in this (the southern part) of Sind. They informed me that I was to be met by other officers at Tatta, and that they had in the meantime been directed to consider my orders and pleasure equally imperative on them, as those of their immediate masters; and further to provide during our progress up the river, all sorts of necessaries for myself and every soul in my suite. This latter part of their instructions,

I tried in vain, to get them to waive or suspend. They declared they would incur the high displeasure of the Ameers by so doing and after holding out against their incessant and pressing entreaties for a day, I was at last obliged to compromise the matter, by giving them a list of about thirty persons, who were regularly provisioned from Commissariate boats in attendance on the Jumptees.

At Tatta— which halting place I reached on the 16th ultimo or fourth day from Vikkur—I was received by Mirza Bakar, Mohomed Yoosif 'Khistmatgar' and Ahmed Khan, Nizamanee, the 'Mahmandars' severally on the part of Meers Noor Mohomed Khan, Meer Mohomed Khan and Nusseer Khan each of whom brought me messages of the most kindly and friendly nature, full of the anxiety with which their Highnesses anticipated my approach to the Capital. Before the first interview with these officers, Mirza Bakar (who though originally a slave, is Noor Mohomed Khan's principal Treasurer, Secretary and bosom friend) sent me a private message by our Native Agent (Moonshi Jethanand who had likewise joined me at Vikkur) to beg that I would not impart to any one that I had been invited to visit Sind (as reported in my letter No. 75 of the 30th August last) circumstances having since occurred which rendered the Ameer very desirous that that fact should be kept secret for the present. This was the first intimation I had of the continuance of the family differences, which caused me so much trouble afterwards but of course I promised compliance with the request.

5. My 'Mahmandars' being as anxious as myself to get to Hyderabad, we proceeded on our voyage on the 17th; and arrived at the landing place three miles from the City, before breakfast on the 21st. Every day during our progress, we had been met by messengers from the Ameers with enquiries, accompanied by presents of fruit, sweetmeats, and as soon as my Jumptee was brought up Mirza Bakar sent for my perusal an autograph note to his address from Noor Mohomed Khan expressing His Highness' joy at the arrival of his old and faithful friend and intimating his resolution to depute his well beloved brother (cousin) Ahmed Khan Talpoor to escort me to the tents which had been pitched for my accommodation.

This nobleman is the son of the Ameer's maternal uncle, Mahmood Khan Talpoor, who is now in command of the Sindian army on the Frontier and the deputation of a person of his rank to welcome me was, I afterwards ascertained, an unprecedented mark of respect and attention, even towards missions from crowned heads.

6 Ahmed Khan Talpoor accordingly came to my boat about 10 a.m. and after a repetition of all the messages and assurances of gratification which had been delivered by the 'Mehmandars', he proposed to me to mount one of Noor Mohomed Khan's favourite horses which he had brought for my use and to accompany him to the Ameer's tents. I however excused myself on the plea of beforehand sending up my servants and baggage, which I said, I should do in the course of the day and follow them myself the next morning. The Khan begged me to study entirely my own convenience and choice on every point as (he added) Noor Mohomed Khan's object was to treat me not as a stranger but as a dear and valued friend, whose visit was a source of real pleasure and with whom he wanted to stand on no kind of ceremony.

7. The 21st and 22nd were occupied in moving from the river to my encampment and in receiving an incessant round of complementary messages and congratulations, with a repetition of which I need not trespass on His Lordship in Council as it is sufficient to say they were everything that hospitality and respect could dictate. I sent the Native Agent to Noor Mohomed on the 22nd to ask to be excused from taking provisions any longer and after several messengers had gone backward and forward I succeeded in my object so far as my people went but His Highness and Meer Nuseer Khan insisted on entertaining Doctor Hathorn and myself for three days, each, and for this purpose they sent a regular establishment of domestics, cooks, &c., who pitched tents in the rear of my camp and provided us twice a day at our usual meal times with sumptuous repasts, sufficient for thirty people, which were served on plate and glass.

8. On the evening of the 22nd Mirza Bakar came to propose to me, in case I was sufficiently rested after my

fatigues, to visit the Ameers the next day. He repeated the wish of Noor Mohomed Khan that I would not divulge to any one that he had invited me to Sind and spoke of His Highness' extreme anxiety to know the contents of the Governor-General's letter of which I was the bearer. I took the occasion to explain to Mirza that I had two distinct communications to make—one regarding the re-opening of the Indus, the other of a purely Political nature—and as there was nothing secret in it I further showed him the copy of His Lordship the Governor-General's letter and authorised him, on his asking leave to do so, to tell his master the purport of it. After he had read the letter he assured me the Ameer would do all in his power to meet my wishes but that there were cogent reasons which I would hear from His Highness' own mouth and which rendered secrecy and precaution advisable, for some time at least. This conversation lasted about two hours and afforded me a perfect insight into the domestic dissensions of the reigning family, but as the facts I elicited from Mirza Bakir were subsequently officially communicated to me I need not here anticipate them.

9. On the morning after, Mirza came back to deliver Noor Mohomed Khan's best thanks to me for the explanatory message I had sent the preceding evening and likewise to ascertain if I still held to my promise of visiting him that day, which I said I would be most happy to do. At 3 p.m. Mirza returned and was followed in about a quarter of an hour by four or five Belochee Khans to escort Doctor Hathorn and myself to the place. We rode through part of the town (which appears to have extended in every direction since 1831) over the ruined bridge of the fort and up the winding, sloping, lanes (or streets as they call them) which were so crowded with armed men, caparisoned horses, and riding mules, that our guides could hardly force a passage for us At length we reached a court-yard where we dismounted and walked round a square building at the further side of which we entered a low door leading into a still lower passage, not wide enough for two men to pass. Here there was much hustling from intruders trying to force their way in, but men were guarded with studied respect, &c, after a little delay we ascended a flight of narrow stairs to a small but very comfortable room into which after putting off our shoes we were ushered.

10. Meers Nur Mohomed Khan, Nusseer Khan and Shahdad (Noor Mohomed Khan's eldest son) were sitting on a couch and in front of them was a low square stool on which sat Ahmedkhan Talpoor who came to welcome me at the river. The room was nearly filled with well dressed chiefs, to all of whom I was introduced before I took my leave. The three Ameers rose on my entrance, came forward a step or two and shook hands with me I was then placed close to Noor Mohomed's right hand on a velvet cushioned chair which raised me higher than their Highnesses. A chair was also brought for Mr. Hathorn and Syed Azamuddin Hassan (the Native Agent at the mouth of the river) was desired to take a seat beside Ahmed Khan Talpoor.

11. After we were all arranged, the Ameers expressed their great satisfaction at again seeing me and their hope that I had been well and happy. Noor Mohomed Khan next enquired about my sea voyage to Vikkur, how I had fared on the river and the Governor-General's health. How long His Lordship had arrived; where Sir Charles Metcalfe was now, &c. He remarked on the advantage of our system of Government in which everything went on with such regularity that the highest officers of the State were changed without its being in any way perceptible. He and Nusseer Khan were also loud in their thanks and praise of Mr. Hathorn's skill and attention to themselves and their families and Noor Mohomed Khan asserted that he then felt stronger and better than he had done for many years before that gentleman's visit to Sind, a fact to which his amended appearance bore ample testimony. He next alluded to Mr. Heddle and the neglect of his Vakeels at Bombay, but I tried to waive the subject and said it was not becoming in me to discourse on the acts of my superiors, to which he answered. "True, very true. I know all and I am both pleased and thankful for your and the Doctor's friendship."

12. His Highness next asked my age and when I told him he smiled and said "You are just five years older than I am." I consider myself quite a young man? How can you be thinking of going to Europe which Mirza Bakar tells me you are? You must not leave your friends. Your remaining in India is attended with great advantage to them, &c. I replied

that every one naturally wished to visit his home after a long absence He rejoiced "True I am selfish and therefore I want you to stay." I told His Highness of the loss of some ships in China Seas, of which I had heard that day and this led to reflections on the dangers of a sailor's life and to Noor Mohomed Khan's quoting an Arabic proverb denoting that there was but a thin plank between people at sea and eternity. He enquired, if the vessels were steamers, whether they were equally subject to damage by storms, &c.

13. The whole style of the Durbar is greatly improved since Mooradali Khan's days. The couch on which the Ameers sat was, as well as the pillows at their back, covered with beautiful brocade, and the whole room richly carpetted. Their Highnesses were apparelled in white vests, with a profusion of precious stones and pearls on their dresses, swords and shields which had an imposing effect.

14. When we had sat about an hour and a half, Noor Mohomed Khan politely intimated, according to the ettiquette of Sind, that he hoped I would stay as much longer as I liked, on which I took my leave but Mr. Hathorn and Syed Azamoodeen, remained behind at the Ameer's request and went to visit Mir Meer Mohomed who was so unwell as to be unable to appear in the Durbar during my sojourn at Hyderabad. He sent me many civil messages by them and late in the evening Mirza Bakar came to invite me to repeat my visit the following day. He told me that Noor Mohomed Khan was overjoyed at the tenor of His Lordship the Governor-General's letter and that he had been sent to receive any communcations I might wish to make before my second visit. As it was then so late I begged Mirza to come back the next morning and when he did so I found that the Ameer wished me to defer my communications, till he had again seen me himself.

15. At 4 p.m. we went to the Durbar. There was less crowding and none of indecorous excitement we yesterday witnessed. Noor Mohomed Khan and Nusseer Khan received us in a small lower room in the same compound. They were sitting on a beautiful flowered silk cloth spread on the carpet, and held down by large golden weights. When we went in, they

rose, shook hands and took their seats on a couch as the day before. We had hardly gone through the usual routine of enquiry when Noor Mohomed Khan beckoned to me to move my chair nearer to him and whispered to me that the men sitting opposite (amongst whom I recognized Mohomed Yoosif 'Khismatgar,' and Mohomed Khan Talpoor, my principle 'Mahmaddar' in 1831) were spies and that I must say nothing that I did not mean to be made public. The two men I have named are the servants of Meer Meer Mohomed and as Mirza Bakar had apprized me on our road to the Durbar that Noor Mohomed and Nasseer Khan had decided that it was proper to keep him (Meer Meer Mohomed) in the dark, until the political questions were discussed; I understood the Ameer's hint which I otherwise should not have done.

16. I therefore introduced the subject of the arrangements to be made on the river and after I had briefly explained them from a paper I held in my hand, Noor Mohomed Khan observed that the British Government could ask nothing that was reasonable (واجب *i.e.*, wajib) to which that of Sind would not accede and then begged me to draw up a memorandum and send it to him, which I promised to do. His Highness instantly changed the subject by making some frivolous complaints of merchants from Sind having been prevented from buying goods (he neither said when or by whom) at Bombay and of persons coming from Jodhpur towards Sind having been lately stopped on the road. The first affair I said I doubted but that if he would furnish me with the particulars, I would enquire into it, and the second I remarked has probably arisen from the dread of the plague which had broken out in Marwar; on hearing which the Ameer told me it was quite proper. He soon after adverted to the intimation I had sent him last year by Captain Burns about blockading his posts if he did not restore the property plundered from a vessel that had been stranded near the sea mouth of the river, and observed it was unnecessary amongst friends. I reminded His Highness that I had on that very occasion taken on myself to assure my own Government that any such demonstration of our power would not be required. To this he rejoined "You did right. I consider you the Agent of both the Governments, and I told Captain Burns at the time you were my best friend. It is your

business to smooth away all difficulties and you have ever done so."

17. The conversation then became general and my having sent His Highness some 'pumbnoses' grown in my garden at Bhooj led to a long dissertation upon fruits which introduced those of Persia and ultimately the politics of that Kingdom and the intention of the Shah to invade Afghanistan, of which the Ameers had had recent intelligence from their Agent at Herat. His Highness told me he meditated going on a pilgrimage to Mecca and asked me how long would it take him to perform the voyage to Juddah in a steamship and whether I thought the Governor-General would kindly lend him one for his conveyance. I said I had no doubt but His Lordship would oblige him and he declared he would write to me when he was ready to start, that he would embark at Karachi. His Highness spoke of this same plan at two subsequent meetings but I nevertheless suspect he has no real intention of carrying it into effect. Before we came away he told me he would send for Doctor Hathorn the next day and asked me to allow Syed Azam Deen to come with him to interpret. He repeated his applause of and thanks for, the former gentleman's skill which had quite restored his health, talked of the Syed's perfect knowledge of English and other acquirements, extolled the excellent conduct of the Hyderabad Native Agent, Moonshi Jethanand; asked who was my Persian Moonshi and said he had often noticed the style of my correspondence with him which was much more clear and energetic than any of his Moonshis could compose. At last he observed it was sunset and near my dinner hour which hint I took to return to my camp.

18. After breakfast on the 25th I had a note written to Mirza Bakar to say my commercial memorandum was ready and to know when the Ameer would receive it. His reply was 'immediately' on which the two Native Agents and my Moonshi were despatched with it and returned about 4 p.m. to say that Noor Mohomed Khan had agreed to all the proposals. He had told the Moonshees that the people of Sind were so ignorant they would not understand what a fair meant under any term, that our cutting down the jungle on the banks of the Indus would be a waste of money, time, as the river was

constantly changing its course and that as long as Syed Azamood Deen was stationed at the mouths of the river there could be no occasion for a European gentleman. He also asked who was to bear the expense of these measures, to which the Moonshees replied of course the British Government. *Enclosure A* is a transcript of the memorandum on which I shall presently offer some remarks.

19. Mirza Bakar came in the evening and brought me a little note from Noor Mohomed Khan begging me to confine my most inmost thoughts to the bearer. Mirza stayed two hours, and we went over the whole of the past and present politics and prospects of Sind in great detail. I told him my candid sentiments of the weakness of the existing Government, of the notorious divisions and dissensions amongst the members of the ruling family, of the advantage to all parties of eagerly closing with the offer the Governor-General had authorised me to make to them and of the little occasion I saw for any secrecy between the two Ameers. I repeatedly asked Mirza how their Highnesses stood towards each other. He said that Noor Mohomed Khan and his brother Nusseer Khan were of course of one mind and that they had every reason to believe that Mir Meer Mohomed Khan was with them but that Mir Sobdar would listen to no one, that he was a man of no personal talent and was led away by bad advisers, that he had a considerable party of low people in his favour because he gives out that he is opposed to our coming to take the bread out of the mouths of the Sindians, that he enacts the part of an agitator and flatters the chiefs and Belochees by telling them that they are quite capable of defending Sind without foreign aid and that our eventual objects are sinister. This procedure the Mirza said rendered him popular with the turbulent soldiery and others, who desire to keep the country unsettled, by which and the consequent frequent occurrence of disputes amongst the Ameers they continue to please their masters. Mirza admitted the full truth of what I had stated as my opinion regarding the weakness of the Government of Noor Mohomed Khan and likewise concurred with me as to the inadvisability or worse of disguise; yet when I afterwards went on to talk of my next interview with the Ameers and the open style I would adopt he said that must

depend on those who were present, for that if even Mir Meer Mohomed Khan's adherents were at the Durbar it would be dangerous to disclose the negotiation.

20. I was prepared for a good deal of the disclosures made by Mirza Bakar for I had heared in the course of the forenoon, that Meer Sobdar had quitted Hyderabad the preceding day on a hunting excursion, that the other Ameers had expostulated with him on the impropriety of his leaving the capital when I was there, that his answer was that he had not sent for me, that he knew nothing about me or my objects, that he did not wish to have any connection with the English and that those who liked might receive me and be civil to me. One of my informants was a native of Hindoostan who had been formerly a servant of Syed Azamooddin but is now a golandaz in the employ of Noor Mohomed Khan and he told the Syed that it was universally belived that Meer Sobdar's sole purpose in going out was to foment dissatisfaction amongst the heads of tribes, whatever his natives might have been he did not, from some unexplained cause, persevere in it as he returned early the next day to the city.

21. On the 26th Mirza Bakar arrived at the tents very early to make the usual daily enquiries after me and to tell me that he and Mirza Khusroo (another Geogrian, high in the confidence of Noor Mohomed Khan, and his brother) were to come immediately after my breakfast under pretence of discussing my commercial memorandum, but in reality to (discuss) political matters. They did not however make their appearance till after dusk and I summoned the two Native Agents to hear the conference. After we had gone over the River-affair, which I could perceive at the moment was a mere form, Mirza Khusroo said they had certain communications for my own exclusive ear and asked me to retire to another tent. I however sent the two Agents away and for what subsequently passed I beg to refer His Lordship in Council to Enclosure B.

22. I excused myself from going into Durbar on the 27th on account of its being Sunday and shortly after the Native Agent, Moonshi Jethanand, was sent to Mirza Bakar's house where he found the Mirza, Mirza Khusroo, the Durbar Moonshi

and others concocting the draft of a new Treaty in Noor Mohomed khan's name, on the contents of my commercial memorandum As soon as I heard of this I sent to stop them and intimated that all that was requisite was an interchange of memoranda between the Ameer and myself. The following morning the Mirza and Durbar-Moonshee brought the memorandum with the replies to my proposals annexed to them and everything was finally settled, except the one article about clearing away the Jungle, upon which another reference to the Almeers was deemed requisite as connected with their Highness's shikargahs or hunting preserves.

23. On monday the 28th Meer Noor Mohomedkhan had a headache, which prevented his holding a Durbar, I therefore devoted this day to receiving visits from a variety of persons whom I had not before had time to see. Amongst them were Mohomed Tahir, Agha Reheem Sheerazee's Agent from Bombay and a merchant from Ludhiana of the name of Uskur Ali, who is on his way to India to lay in an investment. He made a representation to me about having been charged double duties on some merchandise he had sold last season at Vikkur. One duty for that place and one for Shahbunder. I found he had not paid the cash and I promised to apply to the Ameer on the subject. This man told me that goods from India would give a large profit, that the toll fell exceedingly light on such articles, that he had lost by his first speculations from not knowing the market but that Iron, steel Hardware of all sorts &c., would find a ready and advantageous sale, both in Sind and to the Northward.

24. After him came a large body of well dressed and respectable looking Hindoos from Shikarpur, who complained sadly of the oppression they suffered. They said that the once flourishing trade between Sind and Khurasan was utterly ruined, that immence quantities of merchandize formerly passed through Shikarpur, both to the Eastward and Westward but that it was all now stopped, that in fact Shikarpur was almost just now deserted from dread of the Sikhs, who had been at one time within less than 30 'kohs' of the place, that the whole world anxiously looked to us to interpose and thereby restore the prosperity not only of Shikarpur but of all the countries

bordering on our dominions, that the promises and assurances of Runjeetsing, the Ameers of Sind, the chiefs of Cabul, Kandhar and Peshawar, and of the Wallee of Herat, were all of a piece, equally false and faithless, that no trader could venture to depend on them, that they had always an excuse and pretence ready for exactions and that when complainants contrived now and then to lay their cases before them, though they sometimes gave ostensible orders to their officers and Farmers (of Revenue) it was a perfectly understood thing and some times even inserted in the terms of the Farm, that they were not to be attended to. I told these men with whom I chatted for upwards of an hour, of Captain Burns' Mission and of the general views of the British Government with which they were highly gratified and went away declaring that in a few years, commerce would be restored under our auspices to its old standard.

25. In the afternoon I prepared the secret memorandum, Enclosure C, sent word to Noor Mohomed Khan by Mirza Bakar that I should forward it to him by Syed Azum-oo-Din the next morning, which I accordingly did. I directed the Syed to speak to His Highness abont my early departure and to express my trust that no presents would be offered to me as I had heard a rumour, that some were being prepared. I also sent my compass and a rough sketch of the mouth of the Hujjamree branch of the River which I had prepared to explain fully to the Ameers the intention and use of Buoys and landmarks which I had been told they did not yet comprehend. The Syed got to the Durbar before the Ameers appeared, and had a long chat with Mir Ismailshah who had once nearly unlimited power in the court of Sind and was the sole adviser of the Rulers as to their foreign relations. He is now disgusted at the merited insignificance into which he has sunk and makes himself rediculous by his gasconade. He expressed to Syed before all the chiefs, who were waiting to pay their respects to the Ameers, his surprise that after having made a defensive and offensive alliance with Sind we did not act up to our stipulations and protect it from the aggressions of Runjeetsing. He asked if I had obtained my ends and said he had started no objections to them in consideration of his long standing and personal friendship for me, though I had not borne it in an equal degree in mind and had neglected to depute a person

from Cutch to condole with him on the death of his son who was killed in a skirmish with Shah Shuja-ool-Moolk's troops, near Shikarpur.

26. As soon as Noor Mohomed Khan had taken his seat in the Durbar he called the Syed to him and said in a whisper. " These Belochees prevent my talking to you on secret affairs. I will send Mirza Bakar to do so with Colonel Pottenger. Tell the Colonel to give the memorandum you have brought to Mirza and I will read it at my leisure." He also said in a louder voice he would give me my leave on Saturday, that he regretted my departure, but fully appreciated the friendship that had brought me to Sind. That I must visit him daily till I went, and that it would be a disgrace to him if I did not take his presents. When the Syed came back, I despatched Moonshee Jethanand to the Ameer with a memorandum on the following points:—

(1) The levying of double duties at Viccur in the name of that place and Shah Bunder, which I requested might be stopped.

(2) That the Rana of Parkar had represented to me that some of the relations of the Ex-Rana (who had been lately released from confinement at Bhooj and receives an allowance of a rupee a day from the British Government) were intriguing against him and unsettling the minds of the people from the dread of a change in the chiefship.

(3) That I had heard that there was a duty levied on goods sold at Shikarpur by our merchants, in the name of a ruined town on the banks of the Indus and that this exaction was unjust and must be prohibited.

27. To these matters Noor Mohomed Khan gave replies of the most satisfactory kind. He said the exactions both at Viccur aod Shikarpur should be stopped, that many such things were done by the farmers and officers of Government

without his knowing of, or benifitting a farthing by them ; that the rule in Sind was for each Ameer to do as he liked in his own share of the country but that as Viccur belonged to Nusseerkhan and Shikarpur to himself he had no difficulty in meeting my wishes in the present instances. With regard to Pârker he was so pleased with the tranquility in that direction that he would be implicitly guided by my suggestions as to the management of that District.

28. At 3 o'clock we went to the Durbar and were received in the usual kind manner. When seated Nur Mohomed Khan asked me in a low voice if I had had any conversation that day with Mirza Kadir. I answered "None" but that I had delivered the secret memorandum to him. He went on to say "I have told him my views. He will come to you. He has told me all your opinions. I agree with you. You are more than a friend. I am greatly obliged. You must arrange everything. His Highness then assumed his common tone and expressed his regret, that he could not go on a hunting excursion with me but that owing to Mir Meer Mohomed's illness he was unable to quit Hyderabad. He spoke of my wish to decline taking presents, said, that the Syed had told him they would be sold that that did not signify, it was his custom to give, and mine to sell, that he had not every day such a friend as me to "honour him" and that he would only offer me one or two tokens of regard such as would be worthy of me. A great deal of chitchat followed and atlast His Highness proposod to go and visit Mir Meer Mohomed. We walked through the streets which were crowded with people. Noor Mohomed led the way and Nusseerkhan held me by the hand and always put me first where the path was from any cause too narrow for us to proceed abreast. Mir Meer Mohomed really seemed extremely glad to see me. Though suffering very much and looking exceedingly ill he came forward of his couch, before I could prevent him and warmly shook hands with me. I expressed the unfeigned regret I felt at his indisposition, advised him to follow Mr. Hathorn's advice and that I doubted not he would soon be well. After sitting with him nearly an hour I came away leaving Noor Mohomed Khan and Nusseerkhan there.

29. Mirza Bakar rode home with us and went to Syed Azamoodin's Tent whence he sent me word, whilst I was at dinner, that he wished to speak to me on two important topics. I called him and the Syed and he said he had read my secret memorandum which was precisely to the purport of what had passed at my conference with him and Mirza Khusroo. That he had been closetted with the two Ameers for several hours the night before and had detailed to them word for word my opinions and sentiments, that he had been desired to refer two points for my advice. The one, that Noor Mohomed Khan's intention had been, as soon as I left the capital, to call out the whole of the army of Sind, which included every man between the ages of sixty and fifteen, that His Highness would have to go himself as the Head of the State and would be accompanied by one of the other Ameers, whilst two would remain at Hyderabad. That when Noor Mohomed Khan himself moved the whole population "en masse" would be bound to join him, that the expense and trouble would be very great but that those questions must not be considered on so great an emergency, &c. The other point was the possibility of Meer Sobdar's refusing to allow even the commercial agreement to be carried into effect. What was to be done in that case?

30. Touching the first matter, I advised that Noor Mohomed Khan should wait atleast twenty days before he issued any orders for calling out the troops. That in that time the effect of Captain Wade's negotiations with Maharajah Ranjeetsing would probably develope themselves and that if they were successful a vast deal of commotion and injury to the Province would be obviated. With regard to Meer Sobdar, I expressed my belief that he dared not oppose any arrangements made between the two Governments. That His Lordship the Governor-General of India had throughout and more specially in his instructions to me shown his great consideration for all the Ameers individually, but that if the British Government, however desirous of effecting its objects by friendly means, had at one time made up its mind to do so by force in case of opposition, it was not likely it would allow one of the inferior sharers in the country to counteract its enlightened designs. Mirza Bakar most

unqualifiedly acquiesced in my remarks on both points. He said Noor Mohomed Khan would be implicitly guided by my advice as to his own movements. That Meer Sobdar was an idiot, subject to fits, and led by violent and interested men who excited themselves by eating opium and Bhang and then bragged of their promise and deeds that it was therefore hard to say what excess they might think of in this state of frenzy and that it was, at all events, Noor Mohomed Khan's duty to make me aware of his apprehensions. I then suggested that I should write a friendly letter to Meer Sobdar placing the matter clearly before him and pointing out in friendly though decided language the inevitable evil consequences to his interests that must spring from his opposing arrangements which clashed in no degree with his authority or revenue. I concluded by saying that some such step as this would be necessary before we could interfere. Mirza approved of the idea and recommends me to propose it to Noor Mohomed Khan by a message through Syed Azamoodin promised to do so the next day and Mirza left me about 8 o'clock at night.

31. He returned on the morning of the 30th a little after sunrise to say that he and Mirza Khusroo had, the night before, fully explained my secret memorandum to Noor Mohomed Khan and Nusseerkhan. That their highnesses were delighted with the care I had taken on the subject and unreservedly agreed to every syllable and finally, that they wished to see the Syed as soon as possible at Meer Shahdad's house were they would be free from all risk of interruption. I accordingly despatched the Syed, in company with the Mirza and told him to ascertain if he had a good opportunity, whether the Ameers would like two of my tents which I had been informed they had admired from the walls of the forts. The Syed came back about noon, having had a most gratifying interview. The Ameers (Noor Mohomed and Nusseerkhan) repeated their deep sense of my friendship and pains and their entire acquiesence in everything. The only alteration they suggested was that if they are obliged to pay for their troops they are not to cede the fourth share of Shikarpur, but otherwise they are ready to do so tomorrow. Their Highnesses appeared to have speedily plucked up courage, for they told the Syed, that Meer

Sobdar was not worth the trouble I proposed to take about him and that he and his party would be struck dumb when they saw the upshot of our interposition in favour of Sind, and would pray to be forgiven. On minor matters their Highness said, they had ordered two Jumptees, that Mirza Bakar would escort me to Tatta and show me some hawking and other sport, at one of Noor Mohomed's Shikargahs in the way, that they would be thankful for the tents, if I could spare them without inconvenience, that they hoped I would sanction the Syed's coming occassionally up to Hyderabad to visit them, that they had made the same arrangements as before with regard to supplies on my way down the river, and would not hear of any objections to it. What was it amongst friends?

32. I apologized to the Ameers for not visiting them today, the 30th November, as I was anxious to get my letter off to your and Captain Wade's address to announce the close of my political discussion. In the evening Mirza Bakar brought the commercial agreement with the seals of three of the Ameers affixed to it. I understand it was sent to Meer Sobdar, who refused even to read it. I took the opportunity to sound the Mirza as to what sort of presents would be most acceptable to the Ameers and told him of the almost utter impossibility of getting anything new at Bombay. He said their Highnesses preferred Gun Locks and watches to all European manufactures but that whatever might be selected would be prized, as a token of the Governor-General's friendship.

33. On the 1st instant I had a visit from Syed Ali, who is Agent to Ali Mohomed Khan Shoostry of Bombay, and is about to set a factory at Hyderabad. He was much gratified to hear of the arrangements I had made for facilitating the trade, and expressed his opinion that nothing short of our continued and decided interference will ever revive the commerce with Afghanistan. The establishment of fairs appeared to him an excellent idea, and he did not doubt (he said) but they would under our countenance succeed in time. Before he left me he begged me to recommend him to the Ameer's protection and to mention the respectability of his connection at Bombay, of which, I afterwards learnt some enemy had insinuated a doubt.

34. I afterwards saw the Ex-Rana of Parkar who resides (with my concurrence) with his relations about ten miles from Hyderabad, and receives his stipend from our Native Agent. He was loud and unfeigned in his thanks and praises, said that he and every one of his family were our devoted slaves; that he had told Noor Mohomed Khan how kindly he had been treated during his confinement at Bhooj and the liberal arrangement made by me on his release; that His Highness was very much pleased and surprized and had told him the English Government was a very great one and deserved to be so, for its acts.

35. I went to the Durbar at 3 o'clock and did not get back to my tents till dusk—Noor Mohomed Khan and Meer Shahdad were only present when we went in, but Nusseer Khan joined them after we had been there about half an hour. Our conversation was of the most desultory description and embraced a vast range of subjects, for their Highnesses asked questions which led from one topic to another. I showed them Mr. Fassin's map of India and Central Asia, and pointed out the positions of Mecca, Kerbella, &c. I also gave them some very beautifully finished razors and pen-knives made from the iron-work taken off the piles of the old London Bridge and showed them a piece of Indian Rubber cloth as well a bit of the original 'gussi.' The idea of iron having been worked up to such perfection, after it had been five centuries and a half under the water, seemed to them hardly credible, but they were even more astonished at the Indian Rubber cloth and honestly confessed that they would not have believed it possible had they not seen it. They were amused like children, called the different Brohee Chiefs up to stretch the cloth and vowed we were a wonderful people. They eagerly asked me when I made use of the word signifying chemistry; if it was possible to transmute any of the base metals into gold and exulted very much when I said nothing of the kind. I found this was a favourite pursuit of several of their relations, they were glad to get my testimony in favour of their own opinions that it was not to be done. Noor Mohomed Khan said "you are perfectly right when you call your country-mens' Science chemistry. It is the real art your medical men for instance prescribe to a

patient an atom of medicine which has more effect and does more good than a pound or quart of what our Doctors stuff down our throats and which is as likely to poison as cure. That one fact shows your skill and yet our fools talk of making gold and whenever they fail they allege as an excuse that they forgot one little ingredient which they will introduce in the next experiment.

36. Moonshi Jethanand had asked my permission on the 2nd instant to visit Meer Ismailshah who had specially requested him to go to his house. The Moonshi came to me early on the 3rd instant and reported that he had been there the night before, that Ismail Shah had repeated the complaints he had made to the Syed as to my want of friendship in not condoling with him on his son's death and which was further evinced by my not having, since my arrival, invited him to visit me; he further said he had openly expressed his disapprobation to Meer Sobdar at his not putting his seal to the Commercial agreement which had been submitted to him for that purpose, that Meer Sobdar now regretted his own refusal, that he wished to open a communication with the British Government through me and wanted my previous permission to send a Vakeel to me at Bhooj. I went over our views in detail with the Moonshi and said that I could neither hold any sort of underhand intercourse with Meer Sobdar nor recognize his Vakeel, unless he came with the full knowledge and concurrence of Noor Mohomed Khan who was the acknowledged head of the Government and the proper channel of all foreign communication; that I was the Manager in Sind and could make no sort of advances; but that if Meer Sobdar would obtain His Highness Noor Mohomed Khan's consent and depute a person to me at any time (whether before I left Hyderabad, or afterwards) I would be happy to receive him. With respect to Ismail Shah's complaints I observed that they were of no value, that I strongly suspected his object was to excite jealousy, that it was not my part to send to invite him (as he seemed to expect) to come and see me, but that had he done so I should ofcourse have treated him with due civility and attention.

37. During the morning I sent the copy of the Commercial agreement in English and Persian under my seal and signature to Noor Mohomed Khan. His Highness received

it in full Durbar, read it over himself and then gave it for perusal to Meer Ismail Shah who handed it to another person and so it was passed all round the circle.

38. I went at the usual hour to the Durbar. The Ameers were most kind and friendly in their manner. All the people present, except the two Mirza and the Syed, were sent out into an anti-chamber when Noor Mohamed Khan told me he had agreed to all I had proposed and would religiously abide by his stipulations, that should it be found necessary to send our Army to Sind he would pay whatever portion of the expense the Governor-General chose to name, that a British Officer, though not explicitly sanctioned by the commercial agreement, might come and go when we liked and do as we liked, that Shikarpur offered (in his opinion) vast commercial advantages over either Tatta or Hyderabad for an Agent, that the Governor-General must send a Regiment or two, that he and Roostum Khan of Khyrpoor could and would do all we wished there relative to Duties and Customs, that Kharaksing had told an Agent (Akhund Bachal) whom Meer Mohomed had sent to expostulate with him, that he would withdraw the Sikh troops from Rojan on the Hyderabad Government becoming responsible for the future conduct of the population of that district, that he hoped he would do so. If not our intimation would no doubt induce him but nothing must make any change in the agreement I had now made with him (Noor Mohamed). That if ever he wanted our advice or assistance, regarding his other neighbours, he would consult with me and take no step as to external policy without the Governor-General's concurrence. That all the world should see how he appreciated his friendship, that I must be his Vakeel with the Governor-General as I was His Lordship's with him, that I must write to him at all times without ceremony on every matter and that he would pay instant attention to my letters; that he would do the same to me; that the moment I gave him permission to do so he would withdraw his Vakeels from Lahore, that he felt assured our interposition and power would soon tranquilize the countries to the northward, that it would be an act of grace, that would redown to the fame of the Governor-General and bring blessing on His Lordship's administration. After Noor Mohomed Khan had done speaking

Nusseer Khan expressed the same sentiments, said he was equally gratified as his brother with my visit to them and the close connection to which it had led, that he had always wished that to be the case through me, that I must not think of going to Europe till everything was finally and firmly arranged, &c.

39 The people were then called in and the conversation as usual became general. We talked of the British Empire and its Revenue, the power of the King, the Lords and Commons, the manner of raising taxes, granting supplies and making laws, the origin and nature of the East India Company, the Court of Directors, how elected, &c., &c., all of which they said were admirable arrangements. Noor Mohomed Khan introduced the subject of Parkar, and I told him I had given assurances to the Ranna, that so long as he preserved peace and conducted his country properly he would be supported. His Highness said I had done quite right. He then told me I must not pay my cassids who brought letters to him as it was friendly to leave it to him to do so. He said he wanted to prepare some presents for the Governor-General but did not know what would be best. I told him to wait, but he pressed me very much and I mentioned a sword, and any articles of the manufacture or workmanship of Sind.

40. When it grew late and I proposed to take leave, Noor Mohomed Khan said it must be so, that it went to his heart to part with me. He had never met with any one who had made him so happy. He wished he could keep me altogether at Hyderabad, he would send for me to meet him at one of his hunting seats. He hoped yet often to see me in Sind. I was now his brother and as dear to him as Nusseer Khan or his own children, &c. On my rising to come away, he said I must accompany you a few steps and walked to the outer door. Where he, Nusseer Khan and Meer Shahdad cordially shook hands with Doctor Hathorn and myself and commanded us to the divine protection. The next morning Mirza Bakar came and repeated all the Ameers had said the evening before. He told me that there was nothing I could ask that the Ameers would not do, that they trusted to me to write very often and to believe that it was not mere expression

when they declared the gratification my letters would give them. Mirza said he would be back in the afternoon with the tokens of regard and accordingly about 4 o'clock he appeared with two horses with saddles and bridles complete mounted with gold, two rifle guns mounted with gold and enamel with locks, two swords with belts mounted in gold and enamel which he presented to me in the name of three of the elder Ameers and Meer Shahdad.

41. I gave presents in cash to the persons who brought the above gifts as likewise to the Durban, Furashes, Cooks, Durwans, and other servants who had done extra trouble on my account. The tents with the exception of the two I had offered to the Ameers, were all struck in the course of the day and sent with the baggage to the River and on the morning of the 5th instant I rode down and embarked on board the Jumptee. I received a number of messages and presents of fruit during the day. Amongst the messengers was one from Meer Nusseer Khan to ask me if I remembered his promise the day I arrived at Hyderabad and to know whether he had fulfilled it. This alluded to His Highness having, before he could have possibly known anything of his instructions, sent me word that so far as it rested with him, whatever I required should be done and of course I expressed my perfect recollection of the kind assurance I had received.

42. Mirza Bakar and the two other Mehmandars (Diwan Johurmal onbe half of Nusseer Khan and Dost Mohomed 'Khizmutgar' on the part of Meer Meer Mohomed) joined the boats in the evening of the 5th and we cast off at daylight on the 6th. At 4 p.m. that day we brought up at Noor Mohomed Khan's hunting seat, about 45 miles below Hyderabad, where I remained the next day and reached the landing place near Tatta before breakfast on the 8th. I there found the Governor ready to receive me. I halted that and the following day and went to see the City and the (splendid) remains of mosques, tombs, &c., in the neighbourhood. On the evening of the 9th I gave Mirza Bakar his leave and made him a present of some silver spoons and a pair of handle sticks and shades, which he had admired. He is beyond all comparison, the most intelligent and influential man in Sind, and took the greatest interest in the

success of my negotiations, from the conviction which he appeared to feel that they were eminently calculated to support and strengthen the authority of Noor Mohomed Khan to whom he is wholly devoted. Enclosure D is a copy of short memorandum which I drew up at Tatta and entrusted to Mirza Bakar for delivery to His Highness.

43. I have thus finished the narative of my proceedings up to this date. I shall report further in a future despatch and I now proceed to respectfully offer to His Lordship in Council the few remarks that remain to be made on the enclosures A and C referred to in the 18th and 25th paragraphs.

44. The former is so full and distinct that I trust it will be considered to combine every desirable point. I subsequently ascertained that the fees referred to in the 3rd clause are included in the River Toll and I instructed the Native Agent accordingly. I could not discover that there had been in any single case the slightest exaction beyond, or deviation from, the terms of the Toll Treaty, but I nevertheless deemed it advisable to insert the 4th clause. I consider the provisions of the 5th clause to be perhaps the most important of the whole document. Traders will now be liable to choose their own convenience and season for despatching their goods and by retaining them till the southerly gales have set in, they will have them conveyed to the Entrepot at Shikarpur or Mithankote, at less than a tithe. Of the trouble and expense they would cost at other periods, boats then frequently go from 30 to 50 miles a day against the stream and even the increase of the River at that time facilitates their advance by enabling them to run over what are dry banks in its lowest state.

45. I feel (nearly) certain from the enquiries I made and information I gained after the commercial agreement was drawn up, that a fair may be established almost immediately at Shikarpur. The merchants of that place with whom I conversed perfectly comprehended the place and its object and could I at the time have foreseen the result of my political negotiations I should not have hesitated to name Shikarpur instead of Tatta. There will however be no difficulty in making the alteration.

46. Of the great advantage of the measure pointed out in the 9th article, my personal observation has fully on all my trips to Sind satisfied me, but should steam vessels be introduced on the River or even with the warehousing system much of the necessity for removing the jungal will be done away. It was however as well to secure the permission and the Ameers have only requifed that their preserves (Shikargahs) shall not be molested. This is so reasonable a request that I instantly acceded to it. In fact when I recollected that perhaps the only perfectly happy portions of their Highnesses' lives are passed in their sporting excursions, in which they seem to be for the time relieved from all the cares and annoyances of the capital, I felt I had not only no right to ask them to make a sacrifice of the kind but that it would have been wrong to do so and besides this undeniable argument I do not consider that the preserves would materially (if at all) prevent tracking, were the trees that fall into and now remain in the water along the banks at those parts of the river removed and for doing which permission has been granted to us, although the people of the country are prohibited at their peril from touching them even for firewood. Indeed the ' Shikargahs ' are watched and prized with all the care and anxiety that were ever bestowed on Royal Forests in any part of Europe and which we still see shown to game preserves in our own enlightened country. We must therefore bear all these facts in mind, before we can properly appreciate the Ameers disposition to meet our wishes on this hitherto ill-understood and apparently trifling point.

47. I purposely omitted to bring forward the questions of a reduction of the toll, and a portage by land. On the former I wish to make some further enquiries and to obtain the advice of well informed and practical men, before I submit my opinion for His Lordship in Council's decision. With regard to the portage, I feel assured the Ameers would consent to it, but I doubt its practicability from the constant occurrence of small muddy creeks and artificial canals, which run in from the edges of the river and across which merchandise could not be transported without boats and much labour. I look on it also that the warehousing clause of the commercial agreement completely sets the portage on one side and I further felt that

it would not only have seemed to the Ameers unaccountable, but absurd for me to have started doubts on a subject, on which no man in Sind entertains the least. I mean the practicability of navigating the river at all times. It is never denied that it is attended with much difficulty, at this season, and yet without any particular exertion, and some of the boats with their common crew, we went up at the average of 14 miles per day, whilst in the proper months, a rate equal to two and a half or even three times that may be reckoned on, and as for depth of water I believe it will always be found to be ample for vessels drawing between three and five feet, even in the dryest portions of the year. I have myself had no experience, however small, in inland navigation, beyond the three trips which I have made up and down this River but Syed Azamoodin who has travelled much by water on the Ganges and Jumna, and who might be supposed to be biassed in favour of his home, assures me that the facilities on the Indus far surpass those of the Bengal River, that the boat people work harder in Sind and that on his estimation, there is no sort of danger in a good strong boat, in which latter point I most fully coincide, nor could I hear of any accidents.

48. The secret or political memorandum leaves everything to the judgment and pleasure of His Lordship in Council. It will be seen that the two Mirzas in their conference with me (enclosure B) and also Noor Mohomed Khan in my last interview (para. 38) urged that our Agent should be fixed on an imposing footing and dwelt on the peculiar advantage of Shikarpur as a commercial Entrepot, which latter opinion was corroborated by all the enquiries I made. In a political point of view I esteem it to be equally, if not more, important. It is unquestionably the key to Sind, and the establishment of an Agency (there) will not only inspire confidence amongst the traders and open an extensive field for speculation, but will enable us to watch and awe the Meezarees and other troublesome tribes, to indirectly support and guide the imbecile Government of Khyrpoor and to gradually introduce the germ and maxims of good order and a fostering rule, which cannot fail in due time to extend their influence to all classes and imperceptibly to ameloriate the degraded condition of the

people at large, in conjunction with the certainty of our objects being attained.

49. The chief precaution to be observed by our Agent will be, I conceive, not to attempt to force our principles forward too rapidly, which would certainly lead to misunderstandings, complaints and possibly collision. The notions of the most enlightened (if I may apply the term) Sindees are on most matters, and specially as regards commerce, at utter variance with our customs and even reason. When the first boats from Ludhiana arrived at Shikarpur the merchants of that city were obliged to apportion the goods they brought amongst themselves and pay for them at a rate fixed by the Civil Officers. This was done by the express orders of Ameers to prove to us their wish to encourage our speculators, but it had the evil effect of disgusting theirs. When I was at Hyderabad the other day, some Afghan merchants arrived with fruit, carpets, &c., and I find this observation on the occassion in my journal. It shows the very extraordinary system in force here that the Ameers instantly placed a strong guard over the whole Kafila and would allow nothing to be sold till they were themselves served. I understand they pay punctually and liberally for whatever they take and the merchants do not complain of this curious embargo.

50. To resume, I look upon it that the Agency at Shikarpur will become from the very outset a highly important situation and I am disposed to offer my most respectful suggestion to His Lordship in Council that it should be placed on a corresponding scale. I think Sind would be a bad station for European troops for a permanency and there appears to be no occassion to send any there, now that Maharajah Ranjeetsing has agreed to retire within his own Frontier. But I am disposed to recommend that there should be a regiment (or at the very least) a company of Native Infantry, a company of Golandaz with the usual complements of guns and a body of irregular horse, which force might be reduced or strengthened hereafter according to the course of events in Sind and in the regions to the northward and westward.

51. The extra expense of such an armament, I confess I consider to be secondary in the scale of the politics of India. It would, I presume, exceed the fourth of the present revenue of Shikarpur which were estimated to be at three lakhs and fifty thousand rupees a year, but I am told they were at one time equal to sixteen lakhs of rupees and I see no good reason why they should not again attain that maximum It will be however for His Lordship in Council to determine the number of and consequent charge for the troops, as well as the portion of it which the Sind Government is to bear. It has struck me as one arrangement worthy of consideration that the Ameers should, in part of their share of the expense, cede to us the free and untaxed navigation of the Indus for all boats plying up or down under our passports.

52. The despatch was commenced the day I left Tatta and I closed it at Mandvi. The circumstances under which I have written it, in the midst of constant interruptions, hurry and noise oblige me to apologise for its imperfections in style and arrangement. There are other points, connected with my late trip, on which I shall have to trouble His Lordship in Council as soon as I can get settled. I may here anticipate, by mentioning, that I met both Captain Burns and Lieutenant Carless at the mouth of the River on my return and placed those officers in full acquaintance with my proceedings so far as their respective duties required. The instructions I issued to them, I shall submit as soon as possible.

I shall send a copy of this despatch for the information of the Right Hon'ble the Governor in Council at Bombay.

I have the honour to be,

Sir,

Your most obedient servant,

(Sd.) HENRY POTTINGER.

ENCLOSURE A.

The coast of Sind has no hills and is so low and level that it is very difficult and even sometimes impossible to discover the proper entrance to the mouth of the river. Permission is therefore requested to lay down buoys in the water, and to erect a wooden land mark on the shore, at the proper spots where buoys and mark can be changed when alterations take place in the river.

2. Cases will sometimes occur, notwithstanding these precautions, in which from feul woods steam vessels intending to come into the river will not be able to do so, and they must in that event seek for shelter in any port they can reach. The examination of the whole of the coasts and Harbours of Cutch and Sind from Mandvi to Karachi has therefore been ordered and His Highness is requested to instruct his officers to this effect. Vessels of war will not be employed on this duty and when the Harbour of Karachi is to be examined (which has not been since the Mission of Colonel Smith in the year of the Hijree 1224) the officer will make a special application through the Agent for a Purwana to the Nawab of Karachi to furnish a small boat and one or two experienced men to assist.

3. The anchorage fees (Moharee) on boats at Vikkur varies agreeable to their size. To prevent disputes and to encourage the resort of merchants to that and the other Bundurs at the mouths of the river, these fees are recommended to be reduced and defined in order that information thereof may be given to the merchants concerned.

4. Syed Azmoodeen Hassan, the Native Agent appointed by the Governor-General to reside at the mouths of the river has arranged with me and is now about to proceed to the station. It is begged that His Highness will give orders to all the authorities to be kind and attentive to the Syed and to refer to him in the event of any disputes about the toll on the sea or river boats or other matters which are to be strictly guided by Treaty and any extra duties or demands not authorized by it to be positively prohibited.

5. As the best season for sending goods up the river happens to be that at which they cannot be imported by sea it becomes requisite to make some arrangement on this account. It is therefore to be arranged that all persons bringing goods to carry up the River may land them and place them in a warehouse or store at Vikkur or Tatta under the seal of the Native Agent before mentioned until the proper season for their despatch up the river arrives. Any portion of such goods if sold at any time will of course be subject to the duties established by Treaty and after they are over stored no package is to be removed or opened without the leave of the Native Agent else the full duties must be paid on such package.

6. It is the wish of the Governor-General to establish fairs to be held annually and to which merchants from all stations would bring their goods and sell or exchange them for those of others. Thus merchants from Bulkh, Bokhara, Toorikstan, Kabul, &c., would bring the productions of those countries and exchange them for the produce of Europe, India, &c., which are to be brought from India and Sind by their merchants. If the Government of Sind would give due encouragement one of these fairs might be established in its territories which would be a great source of wealth to the people and increase of revenue to the State. It is intended to propose to Maharajah Ranjeetsing to have one of these fairs held at Mithankote or some place in that neighbourhood and should the Ameers of Sind approve of it a similar one might be held yearly at Tatta.

7. The Governor-General of India directs me to explicitly state that he looks to the Government of Sind to keep the Mezarees in complete check and to suggest how this is to be done effectually. If my advice is required I will be ready to give it.

8. The Hyderabad Government must say distinctly whether it is responsible for the acts of the Khyrpur and Meerpur Ameers as connected with the river and traffic by it, because if not, it will be requisite to enter into separate engagement with them, a measure which has been hitherto avoided out of respect to the paramouncy of Noor Mohomed Khan.

9. Amongst the minor arrangements the Ameer's sanction is required to cutting down the jungle along the banks of the river where it may be found necessary to do so to facilitate tracking.

10. The General Superintendence of a British Officer seems to the Governor-General and Colonel Pottinger to be almost indispensable to give effect to the views of the British Government, to the (cordial) aid and union of that of the Sind and to the prevention of disputes, correspondence, &c.

11. It is to be observed that the Government must not be deterred from commencing on some of these arrangements by the apparent difficulty of effecting them. Every important matter looks difficult at first but all obstacles give way to exertion, and encuragement in the course of time.

ENCLOSURE B.

As soon as the Native Agents had retired Mirza Khoosroo again read over the commercial memorandum reiterating Noor Mohomed Khan's acquiescence in its provisions till he came to the 10th article when he said that they (Mirza Bakar and himself) are desired by Noor Mohomed Khan to confess to me alone that he had not the power at that moment to allow a European gentleman to reside permanently at Hyderabad, that he might come and go as I liked and that the residence of Lieutent Wood for so many months, and the permission now accorded to our officers to any number to remain in the country for the purposes of surveying were the best proofs of His Highness's feelings. They admitted that the only obstacle was the weakness of Noor Mohomed Khan's Government and that the Baluchees were numerous and might be powerful but that they were divided amongst themselves and that even the Talpoors (the Ameer's own tribe) protested against being watched and dictated to by an English gentleman. To all this I answered in the same candid and friendly language I had used the preceding day to Mirza Bakar. I remarked that the best means for Noor Mohomed Khan to strengthen his hands was to receive our agent and to let his opponents see that he relied on our friendship. The Mazarees said that His Highness did the latter to the utmost degree, but that whilst he believed and hoped he met the Governor-General's wishes by what he had done and was about to do, he also felt it to be his duty (lazim) to endeavour to reconcile his relations and others to his measures and that he did not doubt but he should be able to do in such a manner as would please me.

We then entered on the affairs to the northward and after an hour's conversation it was settled that an Officer on the part of the British Government is to reside at Shikarpur to be the medium of communication with Maharajah Ranjeetsing on all subjects, that at first troops are not to be sent but that if the Maharajah will not give up his enterprize and will draw his forces and the Governor-General has to send an army to effect that object the Sind Government will pay whatever is considered proper in part of the expense; that Noor Mohomed Khan on

his own and Meer Rustom Khan's part offers to cede the fourth of Shikarpoor and its dependencies for the expenses of the British Agent and his guard and followers; that the number and description of troops to be sent at any time was to depend solely on the Governor-General's pleasure and His Lordship's idea of the exigency of the case, that every facility for cantoning and provisioning them would be afforded; that all supplies for the army or agency brought from India would pass free of duties or any other demand, that Noor Mohomed Khan and Rustam Khan would recall their Vakeels from Lahore and hold not the slightest communication with Maharajah Ranjeetsing except through us and that the Hyderabad Government would be answerable, after these arrangements are made, for any excesses of the Mazarees or other tribes.

With respect to past excesses the Mirza said that the Ameers did not attempt or mean to deny that some had been committed but that that they did so explicitly as to their having been sanctioned by them, that they had offered to make reparation as to losses which was refused and whilst their unoffending subjects were plundered to a greater extent than they believed had been the case with those of the Sikh Government and their Vakeels were in friendly communication with and attendance on Maharajah Ranjeetsing, a plea was made of what had happened to invade their country and to seize and confine respectable officers and above all to degrade and insult the Musalman religion.

To the preceding stipulations and observation I remarked that I did not doubt but the Governor-General's mediation would effect the Ameers object without the necessity for an army coming to Sind and that if such necessity should arise it would also be met, that I doubted whether His Lordship would accept the offer of a fourth of a revenue of Shikarpoor, that a British Agency at that City seemed to me to be calculated to secure the objects of all parties but that if matters were peaceably settled there would be no occasion for any considerable expense.

To this latter observation Mirza replied by saying that the Agent being placed on a firm and strong footing would be.

highly advantageous. It would keep all who were disposed to be evil doers in order and it would give our merchants and all others confidence, that the Ameers therefore hoped the Governor-General would send his Agent and force and that their Highnesses would support his authority in any way. I chose to point out and would take care that he and every one with him were treated with kindness and respect.

With respect to the other foreign relations of Sind Mirza said that the Ameers were just now on the most friendly terms with all their neighbours, that there was not therefore anything with which to trouble the Governor-General concerning them but that in case of necessity arising the kind offer I had made would not be forgotten.

ENCLOSURE C.

SECRET MEMORANDUM.

The arrangements connected with the river are all now happily settled and I trust they will in due time prove a success of wealth and advantage to both States as well as their subjects

The other matters with which I am charged by the Governor-General are equally important and perhaps attended with more difficulty because their settlement depends in some degree on the concurrence of a third power, namely, Maharaja Ranjeetsing.

It is therefore highly necessary that I should before my departure be quite certain that Meer Noor Mohomed Khan and myself clearly understand each other in order that I may make no mistake in submitting my Report to His Lordship the Governor-General.

The following are therefore the points which I understand to have been discussed between Mirza Khosroo Beg and Mirza Bakar on the part of His Highness Meer Noor Mohomed Khan and on behalf of the Governor-General in India:—

1. The Ameer Noor Mohomed Khan proposes, that a gentleman on the part of the British Government shall reside at Shikarpoor and he shall be the medium of all communication between the Governments of Hyderabad and Lahore.

2. That such officer shall be accompanied by such a guard as the Governor-General may deem proper but that the Ameers at present hope that the necessity for a British Army coming to Sind will be avoided by Ranjeetsing's withdrawing his troops on our intimating to him the new terms on which the States are placed.

3. That should Ranjeetsing refuse to withdraw his troops or to desist in his designs against Sind, the British Government will then take steps to extend its protection to Sind and that the latter State will pay such portion of the expense as may be necessary.

4. That the number of troops and the description of them must depend on the judgment of the Governor-General of India, and that the Ameers will assign a place for their being cantoned at or near Shikarpoor and will order their officers at all times to assist in procuring the necessary supplies at the established rates of the country.

5. That any supplies that may be necessary for the troops that have to be brought from India shall pass free of all toll or other duties.

6. That as soon as treaty grounded on the above terms is made and ratified by both the States Noor Mohomed Khan shall recall his Vakeels from Lahore and shall have no communication with the Maharajah Ranjeetsing except through the British Government.

7. Should Noor Mohomed Khan wish to secure the mediation and protection of the British Government from all external enemies I am authorized to receive His Highness's overtures to that effect and to submit them for the consideration of the Governor-General as His Lordship's first object and greatest anxiety is that all the States and kingdoms connected with or bordering on India shall enjoy the blessings of Peace and friendship.

8. That Noor Mohomed Khan offers to cede the fourth share of Shikarpoor and its dependencies for the expenses of the Agent and the troops that may come with him and that the acceptance or otherwise of this offer depends on the pleasure of His Lordship the Governor-Gerneral.

ENCLOSURE D.

MEMORANDUM.

There are two points which I consider of so much importance that I am most anxious to impress them on Noor Mohomed Khan and I therefore make a written memorandum for His Highness's notice—

1. His Highness is aware that the chief reason and the pretence which Maharajah Ranjeetsing has assigned for having invaded the Sind Territories are the depredations and excesses of the Mazaree Baluchees and the alleged supineness with which the Government of Khyrpoor had viewed their lawless proceedings. It is not to be doubted but the Maharajah will urge these facts in his communications with Captain Wade and though it is not necessary to believe all that is said on the subject yet there are strong grounds on the Maharajah's part for remonstrance. Of course one of the first stipulations which Captain Wade will make under the guarantee of the British Government will be that the Mazarees shall be henceforward effectually restrained and this must not merely be promised (as it has been) but completely acted up to. I do not think that this duty of restraining the Mazarees can be left to the Khyrpoor Government alone; and I beg Noor Mohomed Khan to settle at once with Meer Rustom Khan, the arrangement that is to be made. The opinion of his friend is that Noor Mohomed Khan should station a body of his own troops under a respectable and trustworthy officer on the Northern Frontier of the Mazaree districts to keep those notorious plunderers in check. If this is not done complaints will constantly be made and the British Government will have to interfere to preserve its good faith as mediator.

2. I trust that Meer Sobdar will see that the close alliance which has now been formed and which has really rendered the interests of the States the same, is greatly to his advantage in common with all the other sharers in the revenue of Sind, and that he will cease to listen to interested and evil advisers, but as he may plead ignorance

as his execuse I am still of opinion that it would be very advisable for Noor Mohomed Khan to explain to him all that has been done as well as the objects in view. After this is done should Meer Sobdar attempt to interrupt or oppose the arrangements he must stand the consequences, but it is clear that till he has been warned he cannot be fairly called to an account. The Governor-General wishes not to interfere in the domestic policy or transactions of Sind, but as Meer Sobdar Khan's open opposition to the fulfilment of the agreements which this friend has entered into with Noor Mohomed Khan might oblige His Highness to deviate from this rule, it appears to this friend that it would be much better that the first intimation to Meer Sobdar Khan should come from Noor Mohomed Khan which would leave him without an appology hereafter.

9th December A. D. 1836 or 29th Shahban A. H. 1252.

Selections from the records of the Commissioner in Sind.

SELECTION No. VII.

Routes taken by Colonel Soppitt's Detachment in May 1841, from Quetta to Noushkey.

———:o:———

Memorandum prepared by Captain LeMessurier, Superintendent, Sind Survey, in connection with.

Memorandum on the route taken by Colonel Soppitt's Detachment, in the early part of May 1841, from Quetta to Noushkey.

The present route differs but little from that taken by Colonel Soppitt's when he proceeded in the early part of May last against Noushkey, and that only in the number and order of the marches: those now given being more convenient for troops, while those taken proved long and harassing from the want of information on the subject of water, in the Singboor Pass; in other respects the route is precisely the same.

On a reference to the route it will be seen that the distance from Quetta to Noushkey is 93 miles, over a tolerably good road; the first half is particularly so, with the exception of a small portion over the 'Kullan Baruk Pass' which the pioneers cleared for the artillery. The remainder resembles in character that of the Bolan. The Khoord Baruk Pass is 6 miles further south on this range, though practicable for fully laden camels, is not so for artillery. The direct road from Moostung to Punj pace is by this pass.

Kullan Singboor and Khysur river.

At about half way or about 46 miles from Quetta the road enters the bed of the Kullan Singboor river, which may be considered the entrance of the pass, and gradually descending follows it for 22 miles to its junction with the Khysur river 32 miles from Punj pace and $17\frac{1}{2}$ (by the road) north-east of Noushkey, at which point it enters that river and winding with it in all its turns and sinuosities for 12 miles it debouches into the plains of Noushkey at a place called Babund. The last 12 miles, though practicable for artillery, is a broken and difficult road and presents many more natural obstacles to the passage of troops than any part of the Bolan Pass. From Babund the road passes over a plain on the right bank of the river to Noushkey, which merits from its situation and appearance particular description.

Practicability of road for guns

Noushkey and its description

The position of Noushkey has been selected with some judgment, it is somewhat singularly and rather strongly posted on a small promontory formed by the Khysur river bursting through a detached and isolated spur or ridge from the Hootee

range of mountains which terminates $2\frac{1}{2}$ miles to the north north-east of it. The spot selected for the site of the encampment (for it cannot be called a village) is the highest on this spur, and gives it the command of the ground in its vicinity. The river Khysur washes the southern base of this promontory and furnishes an abundant supply of water. This face is naturally scraped and precipitous but accessible in one or two places by foot paths leading up through ravines and water-cuts made by the rains. At this point its elevation is 158 feet above the bed of the river, but from the plain to the eastward it is not more than 123.

On the crest of the spur where it is most elevated an enclosure has been formed of loose stones and mud, carelessly thrown together varying in height from $2\frac{1}{2}$ to $3\frac{1}{2}$ feet. It is of little strength, and an entrance could be easily effected at any part. Within its extent a few openings have been left for entrances, the ascent is short but steep, with well defined roads leading up from various directions. The extent of this enclosure is 150 yards from north to south and 136 from east to west. There are no edifices of either mud or stone to be seen; the space within the enclosure is filled up with a collection of 60 or 70 'Geedans' or tents made of basket work, covered with the dark blanket or felt of the country; the appearance is wild and singular resembling an encampment in the desert. The inhabitants do not exceed 400 or 450 souls, of which 200 are fighting men. To the north the spur extends (but lower) for three-fourth of a mile, the furthermost point being perhaps as high as Noushkey, but it is out of matchlock range. To the south the continuation of the spur on the left bank of the river partially commands Noushkey, the highest point being also out of range. To the west the country is open, and generally extensively cultivated; the supply of water from the Khysur river being abundant for irrigation; but during the present season the wheat crops as well as all other cultivation have been altogether neglected from a dread of Fuzil Khan's depredations, the chief of the Zuygur Mingeels, with whom there is an open feud.

Inhabitants. The inhabitants of Noushkey are of the Rushanee Tribe, who pride themselves in having held hereditary possession for

eight generations. The present chiefs, and these are two, are Abdul Aziz and Dost Mohomed. They are not brothers but descendants of two chiefs somewhat celebrated in the legends of the desert, as the founders of two tribes called respectively after their names Bahahuddin and Jallaluddin. These descendants are styled Abdul Aziz Bahahuddin and Dost Mohomed Jallaluddin, Abdul Azeez being of the former and Dost Mohomed of the latter sect. Tradition relates that the ancestors of these chiefs were bound together by ties of consanguinity and good neighbourhood, and lived in such harmony as the children of the Desert are wont to do. Noushkey in those days was held by a Mogul Naib deputed from Kandhar by the King. This Naib was a roue and as often as a gazelle eyed daughter of the Desert crossed his path another victim was added to His Harem, and in quest of such sport did the Naib pass much of his time. Chance took him at length to the tents of Bahahuddin, who little suspecting the object of his visit invited him in; food was prepared and eaten and the parties separated; but soon it was discovered that the glory of Bahahuddin's house had departed, his daughter had been borne off by the ravisher; pursuit led to little hope of success and an open attack on so formidable an enemy was fruitless in the recovery of his child. In his despair Bahahuddin turned for consolation and advice to his friend and adopted brother Jallaluddin—they met and consulted—when wrongs are grievous and hearts panting for revenge little time is lost in maturing plans; it was decided at once that nothing but the blood of the ravisher could wash out the disgrace brought on their house. They collected a few chosen followers and proceeded secretly to Noushkey—the arrival of strangers was made known to the Naib who invited them to his tent—the invitation was declined saying "if the Naib will first come and eat with us then will we go to him for such is the custom of our tribe". The Naib anticipating no evil went to Bahahuddin's tent—the 'Nagarah' greeted his arrival; in an instant afterwards he and his followers were cut to pieces. The district of Noushkey was immediately seized by Bahahuddin who gave half the lands to Jallaluddin and thus cemented his friendship for ever; and a chief from each tribe has co-jointly held Noushkey ever since—such is the tradition. Tradition.

Supplies. There are none to be found on this route; but in the very smallest quantities at the few villages between Quetta and Punj pace whence to Noushkey there is nothing. The plains of Noushkey generally yield an abundant supply of grain annually; this year the inhabitants were reduced to much necessity and want, the common food being the seed of a wild plant found in the plain—made into cakes, and the undigested grain washed out of the dung of the camels belonging to the force.

Water. Generally the supply is abundant, but some difficulty might arise between Punj pace and Khysur, a distance of 32 miles, though with ordinary precaution there was sufficient for the force.

The springs of Jowurree Kullan and Jowurree Khoord 2½ miles north of the main road are copious—while that at Manoo Chukkool 1 mile distant from the road in the same direction could be made to yield by management a good supply. There are two other springs at the Chummun-i-Singboor and Rustarree; at the latter the supply is very limited. At the Chummun water to any extent might be obtained by digging.

Remarks on the mountain ranges and country. It has been observed the Singboor pass resembles in some degree the Bolan, and that the mountains bounding it do not differ materially in their formation from the great ranges forming the lofty barrier between Kutchee and Baluchistan; the characteristics are certainly the same, being bleak and precipitous but they are less lofty. With reference to the two ranges bounding the Singboor pass it is worthy of remark that, that on the left bank of the river or to the eastward forms the general water lodge which divides the waters of these rivers which rise in the neighbourhood of Kelat and flowing north fall into the Zarah river in the Pisheen valley, such as, the Sheereen-ab, the Shorirode and from those which have their source in the mountains to the west of Kelat and flow south and south-west towards the desert beyond Noushkey Kharan such as the Singboor Kullan, the Khysur, the Guadarree and Gullangoor, &c., a circumstance by which the confirmation of this part of the country will be easily arrived at.

The range to the westward is in many parts equally lofty with the above, *viz.*, 1,000 to 1,200 feet, it borders the Shorirode valley to the west and separates it from the plains of Shorawuk, while to the north the range gradually diminishes as it approaches the valley of the Lorah river—taking up the direction of this range to the south-west it will be seen that it bounds the Singboor pass on that face to the Khysur river whence under the name of the Kootee range it rises to a greater elevation than it had previously attained, 1,500 feet, and completely commands and shuts in the remaining portion of the pass with another range from the eastward; this remark applies particularly to about half way between Khysur and Noushkey where the defile narrows and the hills to the eastward rise wall-like over the road; from the westward a broken and rugged spur from a lofty peak forms a rentering angle which completes the difficulty not easily overcome. The hills to the eastward are barely accessible, those to the westward are stong and easily held and unless a footpath which leads over the neck of land connecting the lofty peak and the main range can be secured there is no means of turning it.

Pursuing the course of the river for 5 miles further the "Kootee" range terminates abruptly to the westward overhanging Noushkey to the north north-eat distance about, $2\frac{1}{2}$ miles, beyond this range to the westward the country is open to the Desert, with loose sand-hills of a peculiar red colour, scattered over its surface. The ranges to the eastward of Noushkey taking a direction more south, gradually break off into undefined masses and detached hillocks which finally lose themselves in the sands of the Desert. There are however detached mountains and even ranges which are seen rising to the westward, some bordering on, while others are described as being situated in, the Desert. Those to the southward of Noushkey and distant from 15 to 25 miles are called Shuk, Hoossain, Jowarkain and Rastkoh; they are named in their order the former being the nearest; while to the westward the hills of Charzaee rise conspicuously to view, some 50 to 60 miles distance. These mountains vary from 2,000 to 3,000 feet in height above the plain.

Roads.

There are many roads which intersect the Singboor pass leading to Kelat, Moostung, Shorawuk and several parts of the Desert; the most conspicuous is the main Cafila road between Kelat, Shorawuk and Kandhar which occurs about $9\frac{1}{2}$ miles south-west of Punj pace; $3\frac{1}{2}$ miles further a short but rather difficult road for laden camels leads to the left (eastward) to Kurd-azab by Rustarree where there is a spring; another of the same description passes by the springs of Jowurree Kullan to Shorawuk 4 miles beyond Rustarree described in route No. 1; while there are numerous footpaths taken by and known only to Brohees. From the Khysur river to Noushkey only one road branches off from the main road; it is called Rah-i-Chukkool and is considered a short cut to Noushkey and a less tedious march for persons travelling lightly than by the course of the river: it however is not a Gun road and is in some parts narrow and difficult; it joins the main road $2\frac{1}{4}$ miles to the west of the junction of Singboor river with the Khysur; it shortens the distance to Noushkey by $2\frac{1}{2}$ miles. From Rah-i-Chukkool a road branches off to the north to Gait on the Shorawuk road from Kelat; it is a mountain road but not described as difficult.

Tribes inhabiting the hills.

The tribes inhabiting the hills on the line of route of the Singboor pass are Sassobee, Soomarlarree and Mingal Brohee, who contrive to eke out a precarious and wandering existence by means of their flocks and occasional acts of plunder; and as no opportunity is lost which holds out the slightest hope of the latter, our advance on Noushkey must have yielded a golden harvest indeed for these destitute people and made up for long years of abstinence. Barren as these mountain ranges are, inhabitants are found scattered over them very generally, though few are seen by the well guarded travellers who might readily believe that the country he was passing through was an uninhabited wilderness, so complete is the desolation and stillness around him.

Rivers.

Several rivers occur on this route, the principal of which is the Khysur. The Sheereen-ab is the first river which is met with; it rises 20 miles to the north of Kelat and flowing from the district of Mungochur it passes to the west $1\frac{1}{2}$ miles from the village of Bubree (28 miles from Quetta) and pursuing

that direction it cuts through the Kullan Baruk range of hills between the two passes of that name, and entering the valley of the Sherirode joins the Sherirode river 3½ miles to the north of Punj pace and finally falls into the Lorah in the Pisheen valley near the village of (?) The water of the Sheereen-ab is slightly brackish. The Sherirode or Chehdehe river rises in the Kird-azab plain, which may be called a continuation of the Sherirode plain to the south 12 to 13 miles; it is generally dry. The Khoord Singboor rising 10½ miles to the south-west and flowing north-east falls into the Sherirode ¼ mile north of the village of Punj pace; while the Kullan Singboor having its source at the same point takes south-west direction and as already stated joins the Khysur, 22 miles from its rise. The two Singboors are generally dry.

The Khysur river.

The Khysur, though a small river at the point where the Singboor falls into it, has a copious stream of water which is constant for 10 months in the year. This river rises in the mountains about 18 miles to the south and perhaps a little east of the point of junction above alluded to; at 6 miles from that spot near a halting ground called Inam Khaostoh the Gindarree and Gullangoor rivers fall into it; the latter is the larger of the two, it rises in a more southerly direction than the former which has its source in the mountains to the west of Kelat and in the bed of which the ordinary road from that place to Noushkey lies, a description of which is annexed. Following the course of the Khysur to its debauchure into the plains of Noushkey it would be difficult to find a river more tortuous and winding in its channel or more closely shut in by lofty ranges. On escaping from the mountains its course is west to Noushkey, where bursting through a low ridge 160 feet high, immediately to the south of that place, it throws off several branches in its passage across the plain to the west and south—the main channel takes a south-west direction and flowing to the west of the lofty mountains called Sheikh Hossain, Jowurkain, etc., enters a tract of land called "Nowur" resembling the plains of Kutchee, so called from the water of the river being bunded up, which are made to spread over and irrigate that district. Escaping there Khysur flows still further to the westward and is finally lost in the sands of the desert.

Gullangoor and Gindarree rivers.

Other rivers which debouche from the mountains further south all partake of the same character, and like the Khysur contribute to form cultivated strips of land where wheat and barley are grown and flocks with camels and horses extensively bred.

General remarks.

The best breed of horses are generally to be found to the north-west of Shorawuk, and in the plains lying between it and Kandhar—many from this district are annually taken to the Bombay market; Camels, also bred in these parts, bear a high reputation and price. I was unable from illness to visit Shorawuk—it greatly resembles, I am told, Noushkey in its position, being on the western side of the mountians facing the Desert and is subject like it to very great heats; it is however described as a more cultivated tract yielding barley and grain in very large quantities, the water from the Lorah river affording for the greatest part of the year abundant means of irrigation—during summer the river dries up. Shorawuk is distant 35 to 46 miles north and west of Noushkey with little or no water on the road which is level but sandy; it is called a night's march.

The climate of Noushkey differs widely from that of Quetta, while its situation subjects it to all the vicissitudes of the Desert. It is 2240 odd feet lower than Quetta. The heat during the period our troops halted at Noushkey from the middle of May to the middle of June varied from 98 to 100 at mid-day and not infrequently rose much higher in the smaller tents of the sepoys, while the deleterious quality of the water of the Khysur river produced fever and dysentry to an alarming extent. I attribute this illness principally to the water, as an escape from it invariably produced a beneficial change in health.

Noushkey is situated in latitude No. 29″-30″.01″

(Sd.) G. P. LE MESSURIER,
CAPTAIN,
Superintendent, Sind Survey.

Quetta, 3rd July 1841.

ROUTE No. 1.

Route from Shawl Kote or Quetta to Noushkey via Bubree Kullan Baruk Pass and punj pace.

May 1st 1841, Quetta. South gate of town to Sir-i-ab M. 8 F. 3

On quitting Quetta the road passes over an open level plain, studded with villages, around which cultivation is extensive, to Sir-i-ab, where water from Karey is abundant and camel and horse forage also; some villages are passed on the road where supplies are procurable. There are none at Sir-i-ab. General direction of route south. One of the branches of the Lorah river takes its rise at Sir-i-ab.

May 2nd Mohbee. M. 14 F. 4·94

From Sir-i-ab leaving the high road to Cutchee, the direction becomes south by west, and the road at $3\frac{1}{2}$ miles passes by a small range of hills to the left called Lundye, whence it gradually but perceptibly ascends, and is somewhat broken and stony. At 8 miles 1 furlong the road divides, one leads to the westward between two hills to the Nishpa pass, the other direct to the Koh-i-lukh. The northern entrance of the former is 10 miles and 170 yards from Sir-i-ab. The ascent for the last mile and half is more decided, though not difficult; at this point the direction becomes south, and the road descends. The pass has lately been cleared by the Pioneers; there is a good road through it, it is two miles long, with the lofty range of the Chettun mountains overhanging it to the west and a small range to the east, the highest point of which entirely commands this Pass and formed this strong hold and watch tower of a band of Kaukers, who till last year held it to the terror and destruction of all travellers: it is now perfectly safe. The other road leads over the Koh-i-lukh, a rough and broken pass to the eastward of the Nishpa and is usually taken by horsemen and foot-travellers. These two roads run parallel and are about half a mile asunder; the distance saved by the Koh-i-lukh is three-fourth of a mile. Three miles beyond the southern entrance of the Nishpa pass, the Mohbee river is gained; the ground is open and extensive on its banks for an encampment with a good supply of water and camel forage. There are no habitations or supplies whatever at Mohbee. General direction of the road south south-west.

May 4th Bubbree M. F. 9 6-160

At mile 1·3 the road passes between low hills, and at mile 4·4 leaves the made road to Moostung *via* Teeree when it enters on an open and cultivated plain and leaving at the 8th mile the village of Deengarh 1 mile to the north, it skirts a small range of low hills for three-fourth of a mile and passes between them to Bubbree, which is a small village with no supplies; water good and plentiful from Korey. General direction of the road west.

May 5th Bubbree to Punj pace.

The road for the first 4 miles 1 furlong passes over an open plain, at the 5th miles it enters some low hills, between which it winds for three-fourth of a mile and then enters the Koltun Barak Pass by a gorge 120 to 130 yards wide and 500 yards long whence the road follows a watercourse and gradually ascends for 1 mile 2 furlongs to the top of the pass; the road is good throughout and offers no obstacle to artillery, the descent on the western side is more abrupt than that on the eastern. The entire length of the pass is 2 miles 2 furlongs; it has been cleared lately by the Pioneers. The height of the range over which the road passes is about 500 feet; on leaving the pass the road enters the valley of the Sher-i-road and at 10 miles 2 furlongs the Shereen-ab river is crossed. It flows north by west and joins Sher-i-road river $2\frac{1}{2}$ miles to the north, which is crossed 1 mile further on; at 13 miles 3 furlongs Punj pace begins. It is one of the four villages of the Sher-i-road district, has 120 houses, 3 shops, supplies are very scarce, but corn is grown in considerable quantities in the neighbourhood, it is watered abundantly from Korey. The general direction of this march is west from Babree.

Punj pace to the Chummun-i-Singboor. M. F. 9 1

For $5\frac{1}{2}$ miles the road passes over a level plain, when it enters broken and undulating ground which continues without any variation till the 9th mile 1 furlong to the Chummun-i-Singboor, which is a beautiful green spot in a small valley 200 to 250 yards wide and three-fourth of a mile long; has a good supply of water, with the best forage I have seen in this part of the country. On the Chummun there is very good encamping ground the road from Punj pace is generally good but the artillery however are obliged to follow the windings of the river to secure a good road. The general direction of the route is south-west from Punj pace.

Chummun-i-Singboor to Manoo Chukkool.

Leaving the Chummun, the road follows the windings of the river, having a gentle ascent and is of the same character as before; half a mile beyond the Chummun the main Cafila road from Kelat to Shorawuk and Kandhar is crossed. At $1\frac{1}{2}$ miles pass a small well of good water, at $2\frac{1}{2}$ pass two others; the supply is scanty in both places. At 3 miles 1 furlong the highest ground is gained, whence the waters flow north-east and south-west forming the rivers Singboor Kullan, and Singboor Khoord, the former flows south-west, the latter north-east. At 5 miles 5 furlongs a road leads to the eastward to Rusterree where water is generally found, but not in any sufficient quantity to water a detachment exceeding 100 men; a road leads from Rusterree direct to the Kelat *via* Kardagab, it is described as level and good for laden camels. Kardagab from Rusterree is 9 to 10 miles. At the 8th mile a road turns off to the right, or rather due north, it passes following the bed of a watercourse to the westward of a small range of hills and leads to Manoo Chukkool distant about $1\frac{1}{2}$ miles from the road, where there is a tolerably good supply of water, with forage for camels and horses. This place has been recently cleared by the Pioneers. A short distance to the south of this spot there is an open place for encamping. Manoo Chukkool is not seen from the road, and it is advisable to procure good guides, to point out the spot; to regain the main road from Manoo Chukkool it is necessary to countermarch the last mile. The road from the Chummun-i-Singboor lies in the bed of the Singboor river and is generally good. General direction of the road south-west.

Khysur river

M.	F.
14	5

Proceeding half mile beyond the turning off to Munoo Chukkool, a road branches off to the right to Jowurree Kullan and Jowurree Khoord, each having a copious spring; the former is 2 miles 4 furlongs distant, the latter is somewhat farther, they are both situated in deep and narrow ravines, the roads leading to them being in the beds of dry watercourses. The water from both these springs after flowing a short distance sinks into the sand. A good road for laden camels leads by Kullan Jowurree to Shorawuk—distance 3 days Munzal.

About half way from Manoo Chukkool to the Khysur river, Judghal is passed where there is a small spring of water, but

not sufficient for any number of men; a mile beyond this another spring called Chukkool occurs and again at the 3rd mile or the 11 miles 5 furlongs from Manoo Chakool a third spring; they are all on the right or western bank of the Singboor river and yield little water in their present state. From the last spring to the Khysur river is 4 miles. The road on approaching it, is rather rugged and stony. The Khysur river has a large stream of water which rarely dries up. The encamping ground on its banks is uneven and stony. The bed of the river is thickly covered with Tamarisk bushes, forage is found for camels in the neighbourhood; hitherto the road is level and tolerably open. The hills on each side vary from ¼ to 2 and 3 miles distant. General direction of the road south-west.

May 8th
Babund
M. F.
12 0-186

The road from Khysur to Babund follows the windings of the river, which are tortuous and extremely distressing, the stream being crossed no less than 42 times in 12 miles. For the first 2½ miles the road lies through thick tamarisk jungle, at the 7th mile a small pass is crossed which is taken by foot passengers and horsemen: camels, &c., having to wind round the southern base of a hill in following the course the river to avoid it, hence to Babund 5 miles the road is of the same description and practicable for artillery, from Khysur to Babund the road is generally closely shut in with lofty hills on each side, which command the pass completely; and as some points are particularly strong and defensible a determined enemy might annoy an advancing force without risk or exposure. This remark refers particularly to that part of the pass the 7th mile from Khysur. At Babund the road emerges with the river from the hills; the Kootee range which had flanked it to the westward here terminates. The encamping ground is good and open at Babund with forage in the neighbourhood. The division of the distances as above given is not a judicious one, but was adopted by the force proceeding to Noushkey. The distance from Khysur to Noushkey being only 17 miles 3 furlongs, the halting ground ought to be at the 9th mile from Khysur, which though a short march in point of actual distance, is still fatiguing one from the windings and the broken nature of the pass and should be adopted in preference to Babund; at that spot the ground is open for encamping, the distance thence to Noushkey is 6½ miles—it has no name. General direction of the road south-west.

On leaving the encamping ground at Babund the Khysur river is crossed, the direction of the road is nearly due west, it passes over an open plain having the termination of the Kootee range of hills at the right hand distance 1½ miles, at the 2½ miles Asiab-i-Noushkey is passed, two large trees mark the spot. Noushkey is situated ½ mile beyond the mill, on a low ridge or spur 160 feet high from the Kootee range of the hills, and overhangs the Khysur river from which it is watered. Noushkey the village or rather encampment consists of 90 to 100 Geedans or tents made of the dark felt or blanket of the country. There are no houses whatever but an enclosure of loose stones and mud surrounds the place; the sides of the hills on which these Geedans are situated are steep and precipitous with well defined roads leading up. The southern side is alone precipitous.

Babund to Noushkey M. F. 30 0

There are no shops or supplies but camel and horse forage abundant to the westward where the plains are extensively cultivated. The Rukshannee Tribe occupies Noushkey, they can muster about 200 fighting men. Encamping ground to the east and west—water abundant from Khysur river.

Total distance from Shawl kote to Noushkey 92 miles.

N.B.—The Singboor pass though resembling in some respects the Bolan is at no time subject to those floods after heavy rain which renders the latter occasionally so dangerous.

ROUTE No. 2.

Route from Shawl Kote or Quetta to Noushkey via Kuhnuh and Punj pace the direct route.

5 miles 4 furlongs road good; cross a deep nulla about half way. Quetta to Ispanhoo.

9 miles 6½ furlongs road excellenct leading up a valley about 8 miles wide, a small running stream and 4 or 5 villages to the right some distance towards the hills. Burg.

12 miles 6 furlongs road as above; a stream of water, forage good and plentiful. Kuhnuh.

Punj pace

14 miles 4 furlongs; the road for the first $5\frac{1}{2}$ miles passes over an open plain; between the 6th mile and 7th miles it leads among low hills to the entrance of the Kullan Baruk pass.

Via Route No. 1.

ROUTE No. 3.

Route from Moostung to Noushkey, via Bubbree Kullan Baruk pass and Punj pace.

Moo-tung to Bubbree.

On leaving Moostung the road leads through orchards and narrow lanes for about 2 miles when it enters an open and cultivated plain much intersected by numerous watercourses, and Korey; they are all passable; between the 5th and 8th mile the village of 'Spet boolundee' or 'sufaid bulandi' is passed. A small village with a small foot on the summit of a mount near it, said to have been raised by a mighty chief (tradition says Tamour-i-Lung) in one day to commemorate the strength of his cavalry, which was so numerous, that each horseman being directed to bring his saddle bags full of earth raised this mound in one day. Two miles beyond this village the river Mobbee is crossed. Road practicable for guns—at $10\frac{1}{2}$ miles the road leads between low hills for 3 miles to Bubbree.

Via Route No. 1.

ROUTE No. 4.

Route from Moostung to Noushkey by the Khoord Baruk pass.

The direct road.

Moostung to Sheereen-ab
M. F.
10 1

The road over a level and open plain, lately cleared by the Pioneers. The first 2 miles through gardens and orchards—numerous Korey intersect the road.

16 miles—The road for 8 miles passes over a level plain, crossing the Sheereen-ab river. On leaving the encamping ground at 8 miles the Khoord Baruk commences—the ascent on the eastern side is short and not steep—the range over which the road passes is under 400 feet high; the descent to the westward is three-fourth of a mile and much impeded by large blocks of stone. The road is narrow and requires clearing for guns, which might be done in a couple of days. On gaining the foot of the pass and 1 mile from the top a small supply of water is found in the bed of the watercourse, thence the road passes over uneven ground for another mile to the 'Sherirode' plain, over which the road leads to Punj pace for 6 miles further. The Sheereen-ab river debouches from the hills to the north of this road $\frac{1}{4}$ mile, close to which there is a good encamping ground for a force of any size, with a good supply of water from the river. The whole plain is covered with camel forage.

Punj pace M. 16 F. 6

The Khoord Baruk pass is quite practicable for laden camels. Distance from Moostung to Punj pace 26 miles 1 furlong.

ROUTE No. 5.

Route from Noushkey to Kelat by the Munjooreh Road.

Road open which skirts some hills on the left and is slightly stony; water from springs in small quantities; forage for camels and horses procurable; See-ah-ab is situated in the bed of a watercourse.

1st stage See-ah-ab M. 7 F. 0

Name of a watercourse which flows from Munjooreh from the east-water from the river which flows slightly but constantly. Road good and level in the bed of the river. Hills on each side from 1 to 3 miles. Water flows towards Noushkey. The Sirpurrah and Soomar Laree, Meeryazee Tribes inhabit these hills, the two former live by robbery &c.

2nd stage Sheik-i Jhul M. 8 F. 0

Water in pools from the bed of the watercourse at 5 miles cross a Kund; the road is difficult and long, $\frac{1}{2}$ laden camels take it; the halting ground is beyond it, and in this side of another Kund or pass less difficult than the former; forage or camels and horses procurable in small quantities.

3rd stage Kundi Monjorab 9 miles.

4th stage Goozibarrat 4½ miles. Name of a river which flows to Kharan, water from river abundant, road good, generally in the bed of the river, a small Kund is crossed shortly after leaving the last ground.

5th stage Churringhee 14 miles. The name of the river, water in pools in its bed, road good, which near the last stage leaves the river and passes over a small Kund called Zeynee rather difficult but short and enters a watercourse called 'Zeynee' which it follows for 7 or 8 miles, when it passes over an open space for a couple of miles and then enters the Churringhee river, which flows to Kharan. The Zaynee and Churringhee rivers join before reaching that place; forage for camels and horses procurable. Only camels half laden take this road.

6th stage Omun-i-Rahee 12 miles. Water scarce from 4 or 5 wells, road over an open plain and level. The halting ground is situated at the foot of Kund-i-Omun-i-Rahee which is difficult takes three hours to cross-the ascent, most difficult on the south-western side. Camel and horse forage found in small quantities.

7th stage Ziarat 16 miles From the Kund-i-Omun-i-Rahee, a road level, occasionally in the bed of the river and occasionally over a Dasht. The large hills are distant some miles but small hillocks occur about the road—water from Doodurran, a copious spring which flows abundantly and irrigates the plain in which Zhoyarut is situated where many villages are seen, wheat, barley, etc., cultivated extensively.

8th stage Gorrako 6 miles. 6 miles. Road open and good, the water flows from the last place by acqueduct—cultivation abundant—country open, and the hills 2 and 3 miles distant.

9th stage Kelat 7 miles. 7 miles. Road good. This road is considered more difficult than the following, but it is however shorter—half laden camels only travel this.

ROUTE No. 6

Route from Noushkey to Kelat by the Ab-Lukkan or the road of the seven passes.

1st stage Inam Khooshab 7 miles. Road for 3 miles good when it enters some broken ground near a place of pilgrimage called Musjid-i-Hybut Khan and

following a watercourse for some miles it passes over the water ledge which divides it from the river Kysinghee, which it follows to a short distance of the next stage. The river Kysinghee falls in to the Khysur to the south of Chulguzzee about 2 miles from the encamping ground at Khysur. The road derives its name from 7 passes, which occur in this stage, it is however practicable for laden cattle, though difficult and tedious, it is closely shut in by hills—water from river not plentiful.

2nd stage Gullungoor 8 miles.

Road bad in the bed of the Gullungoor river which joins the Khysur north of Inam Khoostah—hills high and lofty on each side; forage for horse and camel procurable. Water from river plentiful generally, but sometimes scarce. The inhabitants of the hills are of the Sassoollee and Soomarbari Tribes.

3rd stage Goorgayaneh 16½ miles.

Water from river which flows in small streams, the road lies sometimes in the bed of the river and sometimes over ridges—but good—hills rather distant. The Sirpurrah Tribe generally inhabit these hills—chief of whom is Syed Khan who lives near Kirdagad.

4th stage

At Goorgayaneh the road branches off in two directions. One goes to Moostung, the other to Kelat; by the latter to Sir Bund or Cheydehee is 12 miles, two names for the same place; this road lies in the bed of the Goorgayaneh river, water in small quantities from river, camel and horse forage found in the neighbourhood. The tribes of Sirpurrah and Langow inhabit this tract, mostly the former.

5th stage Langow 12 miles.

Water from well and korey, road good in the bed of a river for a short distance when it leaves it to the right and passing through some low hills it enters the plain of Mangoochur inhabited by the tribe of Langow (Mahim Khan Chief); they are generally cultivators but occasionally breed flocks of camels; supplies procurable in small quantities.

6th stage Karach-ab 10 miles.

In the district of Mangoochur, road open and plain—water from wells and korey—little cultivation.

7th stage Goorako 7 miles.

Total distance 81½ miles. *Via* Route No. 1.

N.B.—I believe this is the route travelled by Pottinger and Christie.

8th stage Kelat 7 miles.

ROUTE No. 7.

Route from Goorgayaneh in Moostung *via* route No. 5, 3rd stage.

1st stage Goorgayaneh to Kurdagab 12 miles.

The road lies in the bed of a watercourse and over small hills. Water flows north-east and north into the Sheereen-ab river, fully laden cattle take this road, water from a korey—forage for camels and horses, country open about Kundagab, being a plain of some extent running north and south.

2nd stage Sheereen-ab 16th miles.

Water from the bed of river, rather brackish—not abundant—road over undulating ground and strong; it skirts the range of hills which divide the district of Moostung and Shori road for about 5 miles when it enters among low hills and undulating ground and finally winds up a watercourse to the Khoord Baruk pass, a short and not difficult pass 2½ miles long, which might be cleared for guns in a couple of days; at present however it is practicable only for laden cattle. From the foot of the Khoord Baruk on the eastern side to Sheereen-ab it is 8 miles when the river is crossed to the encamping ground. No supplies, the road is excellent.

3rd stage Moostung M. F. 10 0.

Road over a level plain lately cleared by the Pioneers.

ROUTE No. 8.

Route from Noushkey to Khanan.

1st halting ground Kurazi Dost Mohomad 12 miles.

A plain and open road, direction south, south-west towards a large detached mountain called Kohi-Sheek Hoosain about 15 miles from Noushkey, whence it forms a conspicuous object.

2nd halting ground Taphoee 18 miles.

The road passes over a plain between Kohi-Sheek Hoosein and the main range of mountains to the eastward—water from a watercourse which flows from the hills south-east of Noushkey 10 to 12 miles, joins the Khysur river some 5 miles to the westward—camel and horse forage in small quantities.

Road good and level, it passes up a watercourse for 6 and 7 miles and crosses a small Kund not described as difficult Chah-i-Thull is situated in a plain where water is scarce, forage from tamarisk bushes in the neighbourhood.

3rd halting ground Chah-i-Thull 11 miles.

Road tolerably good, occasionally passing over level ground, at others in the beds of the Buddah river which flows south from the Sheek Hoosein mountain—the inhabitants of this neighbourhood are generally of the tribe of Somarbarree—water found plentifully and tamarisk as camel forage.

4th halting ground Puth 12 miles.

The road shortly after quitting the last ground enters on a plain called Sund-i-Babul, it is good and level, hills on both sides—distance from 2 to 4 miles—close to Laipshankee, the Cheringhee and Buddoo rivers unite, whence flowing south-west to Kharan they take the name of Bail and run parallel to road. The inhabitants of hills are of the Seeapad Tribe and subject to Azad Khan.

5th halting ground Laipshankee 11½ miles.

Road opens and follows the course of the river Bail. Hills on each side. Those to the westward not lofty. Water from the river, with a little camel forage procurable in the neighbourhood.

6th halting ground Azad Guz 7 miles.

A small village the road open and level, for a mile it follows the course of a river after which it crosses a small spur from the hills to the eastward, and enters on the plains of the Kharan. Water from wells and bunded rainwater, large hills distance 6 to 8 miles to the eastward, to the west it is open to the Desert.

7th halting ground Sarawan 9 miles.

A small village, the favourite residence of Azad Khan. The korey gives a very tolerable supply of water, by means of which (though partially) and rain water bunded up, cultivation to some extent is carried on in this neighbourhood and generally in the. district of Kharan. Azad Khan is himself of Nowsherawanee Tribe while the inhabitants of Kharan are generally Rukshannees and Hullukyyes, they number about 1,000 men. They all live in Geedans or felt tents, and are in the true sense of the word the children of the desert. From the chief downwards they pass their time between the extremes

8th halting ground Karaz Azad Kharan 7 to 8 miles.

of excitement and the indolence of listlessness and as their supply is at all times precarious, Azad Khan like a prudent bandit has secured to himself an asylum in the fastness of an isolated hill called Kullug about 20 miles south-west of Kharan where in the hour of need, when hard pressed by his enemies, he takes refuge with a few chosen followers. The access to this mountain is difficult and only attainable by ropes; the crest of the hills is extensive and affords shelter for 1,500 men; an abundant supply of water enables the fugitives to cultivate corn and barley while date trees which are numerous render the Kohi-Kullug a valuable acquisition to such a man as Azad Khan. There are no buildings or works of any sort on the hill. The general direction of the road from Noushkey to Kharan is south south-west.

Total distance 90 miles.

ROUTE No. 9

Route from Noushkey to Khysur by the Chukkool road.

Noushkey to Chukkool-i-Kullan M. 8 F. 1

The road skirts the Kootee mountains and passes over a stony plain for 6 miles when it ascends to the "Chukkool Khoord" a spring flowing from the hills—the supply of water is plentiful and good—leaving this spring the Chukkool-i-Kullan is joined $1\frac{3}{4}$ miles further, where the supply is of the same description, but more abundant. These two springs are occassionally cleared out to irrigate the plain of Noushkey during the summer months when the Khysur river dries up. Encamping ground extensive to the south-west but stony; forage scarce. General direction of road north by east.

Chukkool-i-Kullan to Khysur M. 7 F. 2

On leaving Chukkool-i-Kullan the road takes an east direction and leading up a watercourse of some size it gradually ascends for 2 miles 2 furlongs to the Kundi Chukkool, a small pass, which in its present state is not practicable for guns, laden camels, and heavy baggage. The descent to the eastward is more abrupt and winding—at 3 miles 2 furlongs the road enters narrow and difficult passage 300 yards long, where two laden camels could not pass abreast, but the road is

otherwise not difficult although the hills rise up on each hand abruptly and wall-like leaving this gorge—where a small spring of good water is found—the road widens and enters at the 4 miles 3 furlongs the Ghoree river which rises to the north near Karoz-i-Moorad Khan and following the course of the river south 7 furlongs to its junction with the Khysur river, it proceeds up the latter for two miles to the encamping ground at Khysur.

The road by the Ghoree river to Karoz-i-Moorad Khan and Shorawuk is described as a good one, it is called a 2 days' journey from Khysur.

ROUTE No. 10.

Route from Noushkey to Gait by the Boon Shoon road, or the road skirting the hills.

The road skirts the Kootee hills from Noushkey and is level and good, but stony—water from springs during the period when the Khysur river dries up, these springs, the Chukkool-i-Kullan and Khoord Chukkool, (1 mile south) are both opened and made to irrigate the plains west of Noushkey. General direction of the road north.

1st stage Noushkey to Chukkool-i-Kullan 7½ miles.

Road open and occasionally undulating—water flows generally west south-west to the plains—forage for camels.

2nd stage Soor-Chukkool M. 5 F. 6

Large spring, road gradually ascending—the water flowing as before—open space for camp.

3rd stage Chukkool-i-Kullan 6 miles.

Wells, water close to surface—and never fails—Road as before, hills on the right hand side or eastward from 1 to 2 miles distant.

4th stage Laadeecha 5 miles.

Road as before, hills, etc., open space for encamping, water abundant, camel and horse forage also.

5th stage Ubberchah 2½ miles.

Water from wells or pools in bed of nulla, road and hills as before, distance from 1 to 4 miles to the eastward.

6th stage Gundajein M. 3 F. 4

7th stage Illaq 4 miles. Good spot for encampment, water from wells—springs abundant—road good—hills as before.

8th stage Yekkebchah 3¼ miles. Water abundant close to the surface, and flowing—road and hills as before.

9th stage Shimalchah 4½ miles. Water from a stream, road and hills as before. Camel forage, &c., found near at hand.

10th stage Bajoo 6 miles. Water, road and hills as before. Forage ditto.

11th stage Gait 4½ miles. On arriving near Gait the road contracts and ascends considerably and passes over a ridge 300 feet high, and descends to Gait into the bed of the Woolah river which flows to Shorawuk. Road good thoughout for guns till near Gait, where it requires clearing.

N B.—This road skirts the Kootee ranges of hills, having a gradual ascent throughout; the road is over undulating ground formed by the watercourses from the hills which flow in a general direction west south-west. The line of the Lorah river is distantly seen from the hills, 10 miles north of Noushkey distance from 10 to 12 miles, taking a direction west by south to the Chargaee mountains, it is generally dry at this season (May).

ROUTE No. 11.

Route from Noushkey to Chargaee.

1st halting ground Noushkey to Dishtook 10 miles. Road open and sandy, water generally from the river Lorah or Boor as it is here called which during summer fails when water is seldom found at this halting place.

2nd halting ground Nowarj-i Sheershah M. F. 9 10. Road good and level, water from bunds. The river Boor passes to the west south-west towards the desert. Inhabitants of this Nowna Trasezye Munguils who breed camels and sheep.

3rd halting ground Nowarj Hussain 12 miles. Road as above. Sand hills to the right hand, water from bund—inhabitants as above, who merely reside here for a short time after rain.

4th halting ground Kanney 12 miles. Road as above water from wells but scarce, this spot is in the desert.

5th halting ground Nullap 12 miles. Road as above, wells and springs, but affording a very scanty supply.

A small collection of mud houses, water from two korey. Inhabitants are of the tribe Singaranee and Toukee, the Chief's name is Lutefkhan who with his brothers Sher Mohomed and Mehrabkhan maintain this district; they are Brohees, and can bring into the field 1000 men from among their own people, but with the Mohomed Summee Tribe with whom they are in close alliance they can double that number. They generally are breeders of camels, horses and sheep, but cultivate grain to some extent. The lofty mountains seen from Noushkey are distant to the west 10 to 15 miles. They are called Mullik Homay the largest and Mullik Harboo the 2nd in size. Pookhotta is conspicuous from its pyramidal shape. Between Chargaee and Noushkey there is not much intercourse, but a good deal between Shorawuk and Chargaee.

6th halting ground Chargaee 13 miles.

Route from Noushkey to Shorawuk.

13 miles-road open and sandy, which leads to the westward of the Kootee range of hills. At Seeah Sing there is no water or supplies, people seldom halt beyond an hour or two at this place.

1st munzil Noushkey to Seeah Sing.

12 miles-a small village of 40 to 50 houses. Water from wells in small quantities as also from a bund—this place is only partially inhabited during winter. The Mundoozye Tribe of Afghans occupy it—road good and level.

2nd munzil Maudoozye.

12 miles—This is the principal village of the district of Shorawuk, of about 50 houses where Cafilahs and travellers make for direct. There is no village or town of Shorawuk. Water at Shiranee from wells and bunded rain water; supplies of grain, &c., procurable. Half a mile before reaching Shiranee the Lorah river is crossed. It is generally dry between May and September.

3rd munzil Shiranee.

The Bund-i-Mamook is passed on the road 6 miles from Mundoozze where water is bunded up and the travellers occasionally halt. Mundoozye Afghans live over this plain in Geedans.

Shorawuk is subject to Kandhar, under a Chief of the name of Shadee Khan, a Barech Afghan. The Mundoozye and Buddalzye Afghans who form a portion of the Shorawuk population are branches of the Barech Tribe. The inhabitants are therefore commonly called Barech Afghans. There is a

small enclosure at Shiranee called a fort, a square and described as a pottery place. The plains of Shorawuk are extensively cultivated in grain and yield abundantly, while camels, horses and sheep are bred to the north-west the two former description of animals being considered good of their sort.

ROUTE No. 12

Route from Shorawuk to Kelat by Gait.

1st munzil Shiranee close to Shorawuk to Gait.

Water from pools in bed of river which rises from the east and flows into the Lorah near Shiranee. The road is level with a gradual ascent, at first it skirts the hills, after which it passes between them. Gait is situated in the midst of hills. Forage for camel and horse procurable.

2nd munzil Karoz-i-Moorad Khan 8 miles.

Water from korey abundant, a little cultivation carried on—road open but winding in the bed of Gait river. Hills on each side about 1,000 feet high—inhabitants Mundoozye Afghans—Chiefs Humeetkhan and Sullemankhan—two brothers. Forage, etc., procurable—

3rd munzil Chummon-i-Singboor.

17 miles from Kerey-i-Moorad Khan.

10 miles from Punj pace.

Road good as before, till arriving within $4\frac{1}{2}$ miles of the Chummon-i-Singboor when a small rising ground is crossed which divides the waters of the Singboor and Gait rivers—water from springs and wells in the Chummon-i-Singboor, where also there is good encamping ground.

4th munzil Ashukhan 7 miles.

Road good and level—it passes between hills—water from wells and springs in the bed of a small river. There are no inhabitants at Ashukan.

5th munzil Kurdagab 5 to 6 miles.

Small village—road good, the latter part descending and is slightly stony—water from korey, inhabitants of the tribe of Sirparrah Kurdagab is on the great Cafilah road from Kelat to Shorawuk, Kandhar, Herat, &c.

6th munzil Chaydabee.

Route from Noushkey to Kelat *via* Kurdagab.

(Sd.) LEMESSURIER, CAPTAIN,
Superintendent, Sind Survey.

Quetta, 3rd July 1841.

	Coss.	Inhabitants.	Water.
Shikarpore to—			
Julalpoor ...	10 ...	None ...	None.
Mangontie ...	14 ...	„ ...	„
Shahpoor ...	4 ...	„ ...	Some.
Chute	7 ...	„ ...	little.
Tuhurkote ...	3 ...	„ ...	„
Phooljee ...	2 ...	„ ...	None.
Sheree	7 ...	„ ...	„
Total ...	47		
Shikarpore to—			
Jagun	6 ...	Plenty ...	Plenty.
Bagban ...	12 ...	None ...	None.
Burghree ...	16 ...	„ ...	„
Shuhur-i-Syed ...	8 ...	Some ...	Some.
Bagh	12 ...	„ ...	„
Nusseerabad ...	12 ...	„ ...	„
Gundanee ...	12 ...	„ ...	„
Total ...	78		
Bagh to—			
Shuburi Chacher ...	10 ...	Plenty ...	Plenty
Sheree	4 ...	None ...	None.

Selections from the Records of the Commissioner in Sind.

SELECTION No. VIII.

THAR PARKAR AFFAIRS.

---

(1) Disputes between the Jodhpoor Darbar and Government of Sind with regard to the boundaries of Umarkote.

(2) Boundary dispute between H. H. Meer Ali Mooradkhan, Talpur, Ruler of Khyrpoor, and the Rajah of Jessulmeer.

(3) Transfer of Umerkote from Jodhpoor State to the Province of Sind.

NO. 444.

Agra, 17th April 1843.

GENERAL,

I had the satisfaction of receiving to-day your letters from the 27th of March to the 3rd of April both inclusive, eight in number.

Your last letter does not inform me of the abandonment of Umerkote and of its occupation by our Cavalry; but I have reason to think, from reports received several days ago from Deesa, that that event may have taken place on the 4th.

I apprehend that we shall be able to communicate very rapidly by Jyepore, Ajmere, Jodhpoor, Balmeere and Umerkote when we have that latter place. Captain Trench, now at Jyepore, has been written to upon the subject.

The Rajah of Jodhpoor is very anxious to repossess Umerkote. It belonged to his Raj till within the last forty years. I should be glad to let him have it, if I were satisfied upon two points, first that he would be able to keep it, and secondly that his occupation of it would not facilitate the smuggling of opium. Upon the latter point I have written to the Governor of Bombay.

I have, &c.,

(Sd.) ELLENBOROUGH.

No. 610 of 1843.

Hyderabad, 26th August 1843.

To

Captain Rathborne,
Collector and Magistrate,
Hyderabad.

Sir,

I have the honour to request that from enquiry among your records or from the old officers of the Ameers, you will acquaint me what lands now of Sind and in the neighbourhood of Umerkote formerly belonged to the Jodhpoor Government.

I have, &c.,

(Sd.) E. BROWN,
Secretary to the Government of Sind.

No. 327.

Jodhpoor, 9th September, 1843.

To

CAPTAIN BROWN,
Commissioner in Sind,
Hyderabad.

SIR,

I have the honour to acknowledge the receipt of your letter No. 635 of the 30th ultimo, and to inform you that the authorities at this Durbar have been requested to send persons with their Duftars to Umerkote to meet the officer deputed by His Excellency the Governor in Sind to institute enquiries regarding the boundary in that quarter.

2. I had the honour to address His Excellency on the 2nd of June last in transmitting for His Exellency's information a copy of a letter No. 514 of the 8th of May from the Secretary to the Government of India with the Governor-General to the address of the Agent Governor-General for the States of Rajputana on the subject of measures for preserving the peace of the Jodhpoor and Jessulmeer frontiers bordering on Sind and the permission granted to the Maharajah of Jodhpoor toreoccupy all the territories he formerly held by his ancestors in the district of Umerkote with the exception of the Fort and the Town, which for the present at least were to be occupied by the British troops. It was further represented to His Excellency through the copies of communications which accompanied my letter, that the requisite announcement had been made on the subject to the Maharajah.

3. Marwar troops are, as you are doubtless aware, in the neighbourhood of Umerkote only waiting for permission to occupy the district of that name till of late annexed to Sind and which was formerly held by His Highness' ancestors.

4. Whatever information I may be able to gather on the subject of the eastern or western boundary of Umerkote shall be transmitted without delay.

I have, &c.,

(Sd) I. LUDLOW,
Political Agent, Jodhpur.

NO. 100 OF 1843.

Kurrachee, 19th September 1843.

To

I. THOMASON, ESQUIRE,
Secretary to Government of India,
Fort William.

SIR,

I have the honour to forward for submission to the Right Hónourable the Governor-General of India, copy and translation of a petition I have received from the Rana of Umerkote and the Chiefs of Chachera and others in that neighbourhood, expressive of the tyranny they experienced at the hands of the ex-Ameers of Sind and their unwillingness to serve under the Jodhpur Government.

I have, &c.,

(Sd.) CHARLES NAPIER.

Enclosure to letter No. 100 of 19th September 1843.

Petition of Mehraj Rana Muljee, Shamsing the chiefs of Chachera and Rukey Raj and Mahasing, the chiefs of Chellan.

Dated September 16th, 1843.

From time immemorial Umerkote and the other adjacent country and the Thurr have belonged to our ancestors, Meean Kalora took it from us sixty years ago and gave it over to the Rajah of Jodhpur; he held it for 30 years since when the Meers of Hyderabad have taken possession of the fort of Umerkote and we have held the lands free of tax till the last 15 years when the Ameers demanded tax, we were unable to fight so we agreed to pay. They demanded the same tax from us as from their other subjects, but the collectors took more and have deceived us. We now petition that you will restore to us the land of our ancestors.

The Balochees have seized the wells in the Thurr which we have spent our wealth in digging formerly; we had no power so we remained silent, but now we appeal to you for justice.

The Rinds and Khosas are continually plundering us, our property consists of camels of which they have stolen more than it would be possible to enumerate; they have stolen a horse and a camel within the last six months; our wish is to be under the British Government and not under any of the Rajahs of Jodhpoor. When the Rajah of Jodhpoor held Umerkote the fort only was under his orders and the surrounding country belonged to us, we wish we may get it.

We were going to Captain Jackson when a Regiment which was coming from Deesa not knowing we were friends fired on us and killed three Thakoores and a guide and plundered Rs. 115 of property belonging to the dead men. Captain Jackson told us to apply to you for the restoration of our property. The present Kardar is committing great tyranny and wants us to pay grain which we have already paid to the Ameers.

True translation,

(Sd.) H. S. PELLY, Lieutenant,
Persian Interpreter.

L (IV) 355—40

NO. 342.

Jodhpur, 23rd of September 1843.

To

CAPTAIN BROWN,
Military Secretary to His Excellency
the Governor of Sind, Hyderabad.

SIR,

With reference to your letter No. 635 of 30th ultimo, I have the honour to enclose for information a copy of one which I have this day addressed to Captain Malet, and of its enclosure, on the subject of assistance rendered by the Jodhpur Durbar in furtherence of his object of ascertaining points connected with the boundary of Umerkote.

I have, &c.,

(Sd.) I. LUDLOW,
Political Agent.

Enclosure No. 1 to letter No. 342 of 23rd September 1843.

No. 341.

Jodhpur, 23rd September 1843.

To

CAPTAIN MALET,
Commissioner, Omerkote.

SIR,

With reference to the enclosed copy of a letter No. 635 of the 30th ultimo, from Captain Brown, Commissioner in Sind, to my address I have the honour to transmit for information a copy of a note which I have this day received from the Vakeel at this agency representing that a copy of the Government map of the territory of Umerkote having been taken it is to be sent to you forthwith by the hands of Amansing Chandawat, who will endeavour to obtain from persons on the Frontier all the information which you may desire to possess regarding boundaries. This course has I am assured been found the only practicable one for eliciting the desired information as no persons at this capital are at all intimately acquainted with the question upon which you are about to enter.

A copy of this letter will be sent to Captain Brown for information.

I have, &c.,

(Sd.) I. LUDLOW,
Political Agent.

NOTE.—Enclosure No. 2 to letter No. 342 of 23rd September 1843 being in Persian, is not printed.

No. 368.

Jodhpoor, 14th October 1843.

To

CAPTAIN BROWN,
Military Secretary to His Excellency the Governor
of Sind.

SIR,

With reference to the objects for which the Jodhpoor troops were despatched hence towards Umerkote some months ago, I have the honour to enclose for the consideration of His Excellency the Governor of Sind a copy of a note* which I have received from the Jodhpoor Vakeel representing on the part of his Government that inconvenience and expense are incurred by the protracted stay of the force in its present position and requesting that if it be not the pleasure of His Excellency that it should occupy the territory of Umerkote, authority may be granted for the return of Jodhpoor troops to the capital whence they can again proceed to Umerkote on permission being received to that effect.

I have, &c.,

(Sd.) I. LUDLOW,
Political Agent.

*Not printed being in Persian.

NO. 215 OF 1843.

Fort William, the 21st October 1843.

To

LIEUT. E. I. BROWN,
Secretary to Government of Sind.

SIR,

I have the honour to acknowledge the receipt of His Excellency's despatch of the 19th ultimo, No. 100, forwarding a petition from the Rana of Umerkote, and others and in reply to inform you that the Governor-General in Council hopes that His Excellency will, when the demarcation of Frontiers shall be settled, have the goodness to communicate any suggestions which may occur to His Excellency with respect to the Rana of Umerkote and the Chiefs of Chachera. When the supremacy over its former territory shall be restored to Jodhpoor, the Governor-General in Council would be desirous that that measure should not be attended with any grievances to the inhabitants, but that they should retain their ancient rights whatever they may have been.

2. The unfortunate event to which the petition refers excited the deepest regret in the mind of the Governor-General in Council, and he would be ready to sanction any measure of compensation for property plundered on the occasion, which the Governor of Sind might think just, and to adopt any means which may seem calculated to soothe the feelings of the relatives of the Chiefs who were killed.

I have the honour to be,

Sir,

Your most obedient servant,

(Sd.) W. EDWARD,
Under Secretary to Government of India.

No. 368 of 1843.

To

The Governor-General Agent,
Ajmere.

Sir,

By direction of His Excellency the Governor of Sind, I have the honour to inform you that Captain Malet of the Bombay calvalry is now employed in marking out the possession of the British Government and Meer Ali Moorad Khan, of the Rajah of Jessulmeer and of the Nawab of Bahawalpore as connected with Sind, and His Excellency would therefore wish an Agent to the Rajah of Jessulmeer to be sent to join Captain Malet.

I have, &c.,

(Sd.) E. BROWN,
Secretary to Government of Sind.

No. 164 of 1844.

Dated Balmeer, 23rd September 1844.

To

Captain Brown,
Secretary to the Government of Sind.

Sir,

Having lately returned from Jodhpur, to which capital I proceeded under authority of the Agent to the Governor-General for the States of Rajputana, upon the subject of the demarcation of Sind and Marwar, I do myself the honour of submitting for His Excellency the Governor's information, documents* enclosed to me by the Political Agent, at the Court of Marwar, bearing upon claims advanced by that principality to territory conquered with Sind and preparatory to proceeding to meet Lieutenant-Colonel Robert's Assistant, upon that portion adjoining his Collectorate, beg the favour of His Excellency's orders and instructions upon my future proceedings connected with the remainder of the boundary of Sind and Marwar.

The documents herewith transmitted being originals, I have the honour to request that you will be kind enough to return them when no longer required.

I have, &c.,

(Sd.) C. F. JACKSON,
Political Superintendent, Mullane.

*Eight enclosures.

Enclosure No. 1 letter No. 164 of 23rd September 1844.

NO. 345.

Jodhpoor, 19th June 1844.

To

CAPTAIN JACKSON,
Superintendent, Balmeer.

SIR,

I have the honour to enclose copies of some papers that passed between Colonel Southerland, Governor-General's Agent, Rajputana, and the Secretaries of the Supreme Government on the restoration of the ancient possessions in Sind of Marwar to His Highness Mahraj Tukht Sing.

I have, &c.,

(Sd.) P. T. TRENCH,
Officiating Political Agent, Jodhpoor.

Enclosure No. 2.

NO. 327 OF 1843.

Camp Simla, 13th March 1843.

To

CAPTAIN I. LUDLOW,
Political Agent, Jodhpur.

SIR,

I have the honour to transmit for your information a copy of Mr. Secretary Thomason's letter No. 373, dated the 6th instant, with a copy of my reply of this date and would feel obliged by your ascertaining from the Maharajah and reporting whether there are any portions of the territory of Sind, not belonging to Meer Ali Murad of Khyrpoor, which it would be agreeable to the State of Jodhpur to possess.

I have, &c.,

(Sd.) I. SOUTHERLAND,
Agent, Governor-General.

Enclosure No. 3.

NO. 373.

Dated 6th March 1843.

SIR,

The Governor-General is desirous of being informed whether in your opinion there are any portions of the territory of Sind not belonging to Meer Ali Murad of Khyrpoor which it would be agreeable to the state of Jodhpur or of Jessulmere to possess.

(Sd.) J. THOMASON,
Officiating Secretary to the Government of India
with the Governor-General.

L (IV) 355—41

Enclosure No. 4.

No. 326 of 1843.

Camp Simla, 13th March 1843.

To

J. Thomason, Esquire,
Secretary to the Government of India
with the Governor-General.

Sir,

I have only now the honour to receive your letter bearing date the 6th instant, No. 373, and beg to submit the following details relating to territory conquered by the Ameers of Sind from Marwar and Jessulmere and in possession of the Ameers upto the date of the battle of Hyderabad the 17th ultimo, although I cannot of course be certain that the details and dates are quite correct.

From Marwar—

Umerkote.—There were originally nine kots constituting the Sovereignity of Marwar and Umerkote was one of these. It was conquered by the Sindians and recovered by Marwar in the reign of Maharajah Bijeesing remaining under his sovereignity during the remainder of his reign and during the 12 years reign of Bheemsing. But it was finally lost in the reign of the present Maharajah in Sumbat 1869 thirty years ago.

From Jessulmere—

Sagur.—By Lieut.-Colonel N. Campbell's map this place lies nearly west of Jessulmere, distant about 40 miles. It was conquered by the Ameers about 60 years ago in the time of Moolajee, the father of the present Maha-Rawul. Three shares of the territory are said to belong to the Ameers of Hyderabad and two shares to those of Khyrpoor.

Gursea.—This place I do not find in any map. It lies in the direction of Hyderabad near Tatteedur about 50 kos from Jessulmere. It was conquered by the Sindians at an earlier period than Sagur and is said to be held by the Ameers in the same share as that place.

The Frontier of Jessulmere extended to Umer Sing-ka-Kanda, in the direction of Sukkur, during the reigns of Juggut Sing and Uka Sing the great grandfather and grandfather of the present Maha-Rawul. And to Bude Barole, in the direction of Hyderabad during the reign of Moolajee the father of the present Maha-Rawul.

The Sindians have encroached considerably on these, the ancient frontiers of Jessulmere and those encroachments continued up to the period of the negotiation of her treaty with the British Government.

2. It would of course be highly acceptable to Marwar and Jessulmere to receive back at the hands of the British Government these territories and any other territories of which they may have been deprived by the Ameer of Sind.

3. I cannot of course tell whether there are any other portions of the Territory of Sind not belonging to Meer Ali Murad which it would be agreeable to the States of Jodhpur or Jessulmere to possess. But on this subject I shall refer to Captain Ludlow and to the Jessulmere Durbar; the result of those references I shall hereafter have the honour of communicating to you.

I have, &c.,

(Sd.) J. SOUTHERLAND,
Agent, Governor-General.

Enclosure No. 5.

NO. 514 OF 1843.

Dated 13th May 1843.

To

CAPTAIN LUDLOW,
Political Agent, Jodhpur.

SIR,

I have the honour for Col. Southerland to enclose copy of Mr. Secretary Thomason's letter No. 522 of the 8th instant, and to request you will be good enough to lose no time in reporting for the information of the Governor-General the steps taken or proposed by His Highness Maun Sing for the re-occupation of the country in Sind, forcibly seized by the ex-Ameers from the Marwar dynasty some years back.

2. It is to be hoped that the contents of this letter will have a good effect on the party in the state opposed to our measures regarding the Naths and convince them how free from every feeling of selfishness our proceedings are in regard to Marwar.

(Sd.) P. T. TRENCH,
Assistant Agent, to the Governor-General.

Enclosure No. 6.

NO. 522.

Agra, 8th May 1843.

To

LIEUT.-COL. J. SOUTHERLAND,
Agent to the Governor-General, Rajputana.

SIR,

The Governor-General is desirous of being informed what measures you propose to adopt upon the territories of Jessulmere and Jodhpur for the propose of controlling the Balochees.

2. It is of much importance that Sher Mohomed and the other Chiefs, who have taken refuge at Shahgurh and elsewhere the edge of the desert, should not be permitted there to organize bands of plunderers for the purpose of directing them either against our territories in Sind or those of allies in Rajwaro.

3. The Governor-General would willingly see the Rawul of Jessulmere again in possession of all the territories of which his ancestors were deprived by the Balochees and the Rawul must see that no more favourable occasion than the present could possibly occur for driving out those foreign invaders and oppressors. The honour and interest of the Raj are equally concerned in now effecting this object. The whole of the territory intervening between the frontier of Jodhpur and the town of Umerkote may now at any time be taken possession of by the Rajah of Jodhpur and the Governor-General would gladly see the Marwarees reinstated in these their ancient dependencies.

4. The Fort or Town of Umerkote must for the present at least as a measure of military precaution be occupied by the British troops, and wherever the British troops may be, the British Government must exercise sole jurisdiction not only over the Fort and Town immediately occupied but over the lands immediately connected with them. With this exception however it is permitted to the Rajah of Jodhpur to re-occupy all the territories formerly held by the ancestors in the District of Umerkote and the Governor-General cordially congratulates the Rajah on an event so honourable to this reign and to his people as the recovery of these ancient territories from the hands of their late barbarous masters.

5. You will assure the Rawul of Jessulmere and the Rajah of Jodhpur that it has been the subject of special satisfaction to the Governor-General that the successes of the British arms in Sind should have led to events which must be so gratifying to their Highness and to their subjects.

I have, &c.,

(Sd.) J. THOMASON,
Secretary to Government of India
with the Governor-General.

Enclosure No. 7.

No. 404.

Jodhpur, 11th July 1844.

To

CAPTAIN JACKSON,

Superintendent, Mullanee.

SIR,

On the 19th June in letter No. 345, I forwarded for your information copies of certain letters that had passed between the Governor-General's Agent and the Supreme Government relating to the restoration of Umerkote Fort and District to this State; I now have the honour of enclosing a copy of a Khurreeta from His Highness to my address on the same subject, also copy of the note addressed by Major Ludlow to this Durbar intimating the purpose of the Governor-General to restore Umerkote. This note was written by the Major on the receipt of the letter from Government noted in my former communication.

2. I likewise enclose copy of the 'Hydnama' between the Jodhpur, Rulers of Sind and the late Maharajah, also extract of a Furd which accompanied the Treaty of 1818, between the British Government and this Durbar and which has reference to Umerkote.

3. From the information contained in those documents and that you have gathered during your residence here, it is hoped by His Highness you will observe from the Khurreeta that you will be able to obtain for him the complete restoration of all the towers and villages possessed by Marwar in Umerkote.

I have, &c.,

(Sd.) P. T. TRENCH,
Political Agent.

Enclosure No. 8

Statement of the Vakil of Jodhpur to Captain Trench, 22nd June 1844.

I enclose sundry documents showing that Umerkote was the property of the Marwar Sarkar. I also enclose for your inspection the accounts of revenue and map of Umerkote and its dependencies.

Enclosure No. 9.

On the 11th of April of the present year the Sarkar of Marwar applied for Umerkote to be restored to them. A letter, dated 20th May, was sent to the British Agent at Marwar by the Secretary of the Governor-General saying that the Governor-General congratulates the Maharajah on recovering Umerkote which belonged to his ancestors, but which has been so long out of his possession.

Enclosure No. 10.

A Treaty sealed by Meer Fateh Allee and Ghoolan Allee states that Umerkote and its dependencies belong to the Maharajah Deerraj and that will not interfere with it in any way.

Enclosure No. 12.

The Maharajah applies for permission to the Governor-General to be allowed to retake Umerkote from the Talpoors by force which he lost three years ago by the treachery of his own people.

Dated 6th January 1818.

Answer.

If you cannot recover by fair means and choose to use force, the British Government will not interfere.

True translation.

(Sd). PELLY, LIEUTENANT,
Persian Interpreter.

No. 2991 of 1843.

Kurrachee, 10th October 1844.

To

Captain Jackson,
Political Superintendent, Mullanee.

Sir,

I am directed to acknowledge the receipt of your letter No. 164 of the 23rd ultimo, relative to the claims to Umerkote advanced by Marwar.

In reply I am directed to state that His Excellency the Governor will not give up to Marwar the Fort or Town of Umerkote nor lands within 5 miles to the east of it. His Excellency with reference to the boundary question between Marwar and Sind have no instructions, to give you on the point you should refer to Colonel Roberts to whom in conjunction with yourself the duty has been assigned. As requested the original enclosures to your letter are herewith returned.

I have, &c.,

(Sd.) E. BROWN,
Secretary to Government of Sind.

No. 1091 of 1844.

Hyderabad, 31st December 1844.

To

The Secretary to Government of Sind.

Sir,

I have the honour to forward extract from letter from Lieutenant Forbes regarding an amicable settlement of the feuds at present existing between the Bathees of Mounder and Sodas of our territory.

I have, &c.,

(Sd.) A. B. RATHBORNE,
Collector and Magistrate, Hyderabad.

Enclosure to letter No. 1091 of 31st December 1844.

Extract of a letter from Lieutenant Forbes, Deputy Collector and Magistrate of Meerpoor, to the Collector and Magistrate of Hyderabad, dated 29th December 1844.

From all I can learn the Mounda Bathees are most anxious amicably to settle all their disputes with the Sodas in our territory. They write that they will do anything that the Governor orders. That they will restore all stolen property and give up the thieves. Advantage, I think, ought to be taken of the funk established for it is nothing else on account of our ryots. Our Sodas are just as much to blame, I suspect, as the Bathees and have by all accounts carried off from the neihgbourhood of Rinda as much property if not more than they have lost.

Should it meet with His Excellency's approbation if the Jessulmere and Jodhpur Governments would agree, Panchayat composed of the principal zamindars or rather Chiefs of Sind, Rejhistan, Jodhpoor and Jessulmere who reside near the boundary, would be the best court for these lawless regions and the one most likely to settle all disputes properly. Mallet is much liked by these children of the Desert and if a Panchayat was sanctioned would make the best Superintending Officer I know.

True extract.

(Sd.) A. B. RATHBORNE,
Collector and Magistrate.

NO. 58 OF 1845.

Sukkur, 7th January 1845.

To

CAPTAIN JACKSON,

Political Superintendent,

Balmeer.

SIR,

By direction of His Excellency the Governor of Sind, I have the honour to forward a copy of a letter No. 1091 of the 31st ultimo and its enclosure received from the Collector of Hyderabad, and I am directed to state that the plan proposed by Lieutenant Forbes of settling the existing feuds between the Bathees of Mounda and Sodas of our territories appears to His Excellency to be a very good one, if it can be arranged.

(Sd.) E. BROWN,

Secretary to Government of Sind.

Khyrpoor, near Buhawalpore,
5th January 1845.

My dear Brown,

I have come to this part of the country partly on account of boundary disputes between Bahawal Khan and his neighbours—but my reason for this advertising myself, as it were, is not to apprise you of that fact, but is connected with other matters. If however in writing to you in this way about them I do what is objectionable, consider this sheet as never blotted but burn it and let me know that you have done so for my present information and future guidance.

Khubchand, a trader of Buhawalpore, has bewailed to me the joint cases of himself and his brother Dharamdas in Sind. Khubchand was considered by Governor to have done good service in the way of example, etc., in connection with the opening of the navigation of the Indus and generally to have made himself useful to British officers in former times. In 1838 he received a Khilut from the Governor-General. After that period he appeared to have lent money to the Hyderabad Ameers (who had payments to make to us) and when, in 1843, their conduct lost them their country, Khubchand says they were in his debts rupees 1,55,000 of Sind currency. He appears to have applied to the Governor of Sind on the subject, and in May last His Excellency appears to have said that cases of the kind had been referred to Calcutta and thence, it was believed, to England.

Khubchand is in debt to our Government through one or more of its Agents on this side (of whom I am not one so situated) and he makes difficulties about paying what is due for, native like, he perhaps thinks. We shall be compelled to pay him what he claims from Sind in order to pay ourselves as it were.

I presume that in the case of Sind, Government will make good all ordinary claims against the Ameers—as among protected chiefs when any unforeseen cause, or cause which could not be foreseen, deprives them of their possessions, claims

against them are listened to which otherwise would never be heeded. Would therefore you recommend that Khubchand should once more solicit attention to his case through your office or should he ask the Governor-General's Agent, N.-W. Frontier, to lay it before the Supreme Government.

With regard to the fugitive members of the Khyrpoor family I have been told that the Nawab must understand he is not to allow them a refuge in Buhawalpore but that they should either go to Sir Charles Napier or to Major Broadfeet. The Nawab I believe would have us think that those who did enter his territory have now quitted it. But there is some reason to doubt this, so far as I can at present make out. What is the law in the case ? or the privileges of a Dependent Territory ? Are not the fugitive prisoners equally liable to punishment as if they had set foot on ground under one of our own Magistrates.

I shall be at Khyrpoor where the Nawab is in a week (I am going slowly) and a letter directed in Persian and English outside the Dak will reach me safely.

My news from Lahore extends to the 28th ultimo only. No excesses had been committed. The Sikhs indeed feel that to have tolerated a foreign dominion, such as that of the Dogras of Jammu was disgraceful to them. They feel too that to be strong they must be united and there is also in reality a strong attachment to the mystic Khalsa.

I do not know that my duties will allow me to get to your neighbourhood but I should like much to shake you again by the hand believe me, however, very sincerely yours.

(Sd.) J. CUNNINGHAM.

NO. 19 OF 1845.

Dated Balmeer, 25th January 1845.

To

CAPTAIN E. BROWN,

Secretary to the Governor of Sind.

SIR,

Upon the subject matter of your letter No. 58 of the 7th instant and its enclosure, I have the honour to transmit for the information of His Excellency the Governor of Sind, copies of letters to and from Major C. Thoresby, Agent Governor-General for the States of Rajputana.

A copy of Major Thoresby's letter will this day be transmitted to Captain Mallet for his sentiments as to future proceedings.

I have, &c.,

(Sd.) C. T. JACKSON,
Political Superintendent, Mullanee.

Enclosure No. 1. to letter No. 19 of 25th January 1845.

No. 35 OF 1845.

Jodhpoor, 16th January 1845.

To

CAPTAIN JACKSON,

Political Superintendent, Mullanee.

SIR,

I have the honour to return the original documents enclosed with your letter No. 9 of the 15th instant.

2. As the Maha Rawul of Jessulmere is just, at present, absent from his country, on a pilgrimage to the Ganges, I would suggest your communicating with Captain Mallet on the question of the mode in which the disputes that exist between the Sodas and Marwarees can be best adjusted by Panchayat, in the first instance, leaving those connected with the Jesulmere territory for subsequent consideration.

3. We may consult the Durbar of Jodhpoor on whose part you might act, when the most eligible cause of proceedings shall have been determined by you or Captain Mallet.

I have, &c.,

(Sd.) C. THORESBY,
Officiating Agent to Governor-General.

Enclosure No. 2.

No. 9 of 1845.

Dated Jodhpoor, 15th January 1845.

To

Major Thoresby,
Agent to Governor-General, Rajputana.

Sir,

The Jessulmere principality being chiefly concerned, I have the honour to enclose for your consideration and instructions correspondence in original from the Secretary to the Government of Sind.

When no longer required may I request the favour of the above documents being returned.

I have, &c.,

(Sd.) JACKSON,
Political Superintendent,
Mullanee.

NO. 14 OF 1845.

Sukkur, 23rd March 1845.

To

CAPTAIN MALET,
Resident, Khyrpoor.

SIR,

I have the honour by direction of His Excellency the Governor to forward copies of a letter and its enclosure No. 19, dated 25th January last, relating to disputes between the Sodas and Bhutees and with reference thereto to request that you will furnish me also the information required by Major Thoresby, Agent to Governor-General for the States of Rajputana.

I have, &c.,

(Sd.) E. BROWN,
Secretary.

No. 705 OF 1845.

Fort William, 14th March 1845.

To

CAPTAIN E. I. BROWN,
Secretary to Government of Sind.

SIR,

"I happen to know though not officially from Sir Charles Napier that he considers that Umerkote never belonged to Marwar."

With reference to the annexed extract of a despatch, dated 4th October 1844, received from the Officiating Agent at Jodhpur, I am directed to request that you will move His Excellency the Governor of Sind to furnish the Supreme Government with any documents or proofs on which His Excellency may have founded the opinion alluded to by Captain Trench that the Fort of Umerkote never belonged to the Marwar State.

I have, &c.,

(Sd). W. EDWARDS,
Under Secretary to Government of India.

Selections from the Records of the Commissioner in Sind.

SELECTION No. IX.

Instructions to Deputy Collectors of Hyderabad District regarding collection of grain revenue in Hyderabad Collectorate, 1843—1847.

Instructions to Deputy Collectors of Hyderabad regarding the collection of grain Revenue in that Collectorate.

1. Deputy Collectors should always bear in mind that they are placed in the districts as a check upon the Kardars and other native subordinates and not to supersede their functions. They will therefore not interfere with these people in the ordinary duties except to prevent oppression towards the ryots on the one hand and fraud towards the Government on the other; but they will exercise a general supervision on them.

2. Buttaidars with their Mohurars and Zabits will be sent on the 1st proximo from Hyderabad into every Purgunnah in the Collectorate who will make the Buttai and forward their 'cussera' papers to Collector leaving a copy with the Deputy Collector of the district in which the Purgunnah lies.

3. These papers will be checked by a reference to the Buttai and Zabit accounts of former years in the Collector's office and it will be the duty of Deputy Collectors in their towns through their districts to ascertain by personal inspection how far the Buttai and 'zupts' as made by the Buttaidars and Zabits correspond with the actual quantity of ground cultivated and its produce this year. Until a regular survey is made of the whole country, this can never of course be ascertained to a nicety, but enough may be done by a careful inspection aided by information gained from the cultivators, to discover cases where gross fraud is committed or attempted; and in the event of Deputy Collectors, finding any such case an immediate report should be made to the Collector.

4. Ambardars will be similarly appointed from Hyderabad and into their charge the grain as estimated by the Buttaidars will be given; and when the whole has been collected instructions will be issued by the Collector regarding its disposal. The

Deputy Collectors will visit the granaries in their progress and report anything they may perceive defective.

5. After the grain has thus been collected and given in charge of the Ambardars, the several Kardars will come in with their account to the Headquarters according to former custom, leaving a copy of the same with the Deputy Collectors of the district.

6. The Deputy Collectors will then go over the Kardar's, the Ambardar's, the Buttaidar's and Zabit's duplicate reports (the original being sent to the Collector) and aided by their own personal observation ground a special report to be sent in as early afterwards as possible on each Purgunnah they may have visited within their districts, noting the native subordinates who have proved themselves good servants and those who appear to have been guilty of fraud or oppression. They will add any remarks in the system in general and suggestions for improvement that may occur to them This report should specially include memorandum regarding the quantity of waste land in each Purgunnah with remarks regarding its capabilities for cultivation, particularly noting whether any, and, if so, what extent of new canal would be necessary and what other expenditure would be required for that purpose.

7. No person on the establishment of any description is either to be entertained or dismissed, except on sanction personally obtained from the Collector; but reports should be made of the conduct of all within each Deputy Collector's district, who may on the one hand appear specially to merit approbation or on the other to deserve censure or dismissal.

8. No new grants are to be made or old ones recognized nor is any expenditure to be incurred or public property disposed of without the same sanction; but Deputy Collectors will in all cases report where an additional expenditure appears absolutely necessary and also what savings they may think may be made in the present system consistent with efficiency.

9. All payments will be made by the Kardars and Ambardars direct to the Collector's Treasury at Hyderabad.

10. A weekly report to the Collector should be made during the harvest season by each Deputy Collector, giving a general view of the state of cultivation, etc., in the districts he may be then, in his progress report, remarking anything worthy of note. This may be written in the form most convenient either official or private, but should be on foolscap paper with a margin to admit of filing.

(Sd.) A. RATHBORNE,
Collector and Magistrate.

COLLECTOR AND MAGISTRATE'S OFFICE,
Hyderabad, 28th November 1843.

HYDERABAD COLLECTORATE,

Mohomed Khan's Tandra, 17th August 1846.

MEMORANDUM.

In order to assimilate as much as possible the duties performed by Deputy Collectors in the Hyderabad Collectorate to those performed by the Deputy Collectors in the other Collectorates of Sind, the following rules are promulgated and are to be implicitly followed by the Deputy Collectors of the Hyderabad Collectorate.

Under the Government of the Ameers the accounts of the revenue collected in kind and of the land tax on vegetables, garden ground, sugar-cane fields, &c., called 'Dhull-ka-Zummin' were rendered twice a year, namely, after the completion of the Buttai of the Rubbee and Khariff crops or during the months of January and July. The whole of the Kardars, Buttaidars and Ambardars, &c., with their Moonshees presented themselves at these seasons at Hyderabad where within the space of about a month the whole of their accounts were adjusted.

Deputy Collectors will each adopt a similar practice in future and direct the public servants abovementioned to attend at any place most convenient within their respective districts to render their accounts for the Rubbee collections so as to enable the Deputies to close and send them off to me on or before the 31st July and for the Kharif ditto on or before the 31st January in each year. The monthly collections on account of customs, taxes and fines the Deputies will close and despatch to my office on or before the 6th of each month. The accounts sent in monthly and all contingent charges together with the accounts of the land tax, levied in money, I require, to be translated into English previous to their being forwarded. The half yearly accounts of grain collections need not be translated but an abstract of them in English is to be made. Deputies should be most particular that the farmers of Customs pay their monthly 'kists' or instalments with regularity and on the very day of their becoming due and

Deputy Collectors will henceforth draw pay for and pay the whole of their establishments and of the establishments of the Purgunnahs in their charge.

Deputy Collectors are requested to submit the names of persons to be appointed Buttaidars, Zabits and Ambardars should there be any peculiarly qualified residing within their districts, where the Kardar may not be entrusted with the Buttai and measurement of the crops in their own Purgunnahs. The above public servants should all be in readiness to proceed into the different Purgunnahs for the purpose of making the Buttai on the 1st April for that of the Rubbee and on the 1st of October for that of the Kharif crop.

As the Buttai of some Purgunnahs will be finished much earlier than that of others the papers and accounts of the former should be despatched to me at once and should not be kept waiting for the latter. A report should accompany those accounts stating in what manner the different servants employed have conducted themselves and how they have performed their work and an abstract for each man's pay forwarded for adjustment at the same time.

In the event of the Deputies' "English writers" falling sick and they being unable to translate the accounts of the former month before the sixth of the current month they will have the goodness to forward them to me un-translated and a Persian copy, sending the translation as soon afterwards as possible.

All contracts for the farm of customs and all tenders for the purchase of grain will be taken by the Deputy Collector of the district, but require to be submitted for my sanction previous to the agreement being finally concluded.

All cash received by Deputy Collectors to be transmitted at once to the Headquarters so as to leave no balance in their hands and make any distinct treasury establishment necessary.

Deputy Collectors will endeavour as far as possible to ascertain by personal inspection how far the Buttai and the 'Zupt' as made by the Buttaidars and Zabits agree with the

actual quantity of ground cultivated and its produce during each season and will make a special report after the conclusion of each Kharif and Rubbee Buttai on the subject.

On or before the 1st November Deputy Collectors will have the goodness to report the amount required by each Kardar for the purpose of cleaning out the water-courses and at the same time will state whether any and if so what extent of new canals will be necessary, forwarding an estimate of all the probable expense and of the probable return to be expected by Government.

When it is necessary to construct bunds an application to Government must be made through me previous to the work being commenced, and Deputy Collectors in forwarding their applications will be particular in stating the probable expense of the work and what proportion of the work should be borne by Jagheerdars. They will also state the probable amount of the benefit which will result to Government from the construction of the bund.

In the event of any cultivator applying for waste land, Deputy Collectors will first ascertain whether or not the land applied for has ever been granted to a Zamindar and should it prove to have been granted they will summon the Zamindar and, having ascertained the correctness of the title, will enquire of him whether or not he will cultivate the land; if he replies in the affirmative, the applicant for the land should have a portion assigned him in some other quarter; but if the Zamindar refuses to cultivate the land required it should at once be made over in Ryotee to the applicant. If the Zamindar neglects to cultivate the land after promising to cultivate it, he must be charged at the usual money rate of the Purgunnahs and no man should be allowed to occupy more land than he can cultivate.

Under the above rules the following are the papers to be sent to me periodically in addition to those now forwarded:—

WEEKLY.

(1) Memo. of weekly Government grain in store in the several Purgunnahs in charge of the Deputy, in English and Persian.

(2) Price current of ditto, past week, English and Persian, and memo. of present biddings for same.

MONTHLY.

(1) Statement of receipts and disbursements of each Purgunnah for the past month, in English and Persian.

(2) Salary Bills for Establishment of each Purgunnah, in English, in duplicate.

(3) Contingent Bills for contingent charges on account of each Purgunnah, in English and in duplicate.

(4) Salary Bill for Deputy Collectors' Establishment.

(5) Contingent Bills for ditto.

(6) Statement of fines levied.

(7) Return of alterations in Establishment during the past month.

(8) Acquittance roll of Establishments.

HALF YEARLY.

(1) Buttaidar's and Kardar's Fasul Accounts, in Persian, with abstract of the same in English.

(2) Special report on the same.

ANNUALLY.

(1) Estimate of Canal and Bund expenditure for the ensuing year in Persian, with abstract in English.

(2) Complete roll of Establishment showing the alterations during the past year.

(3) Confidential Report on the character of the several Purgunnah Native Officers.

The weekly returns will be made up to the Saturday night and forwarded on or before the ensuing Tuesday.

The monthly report of tax collections are to be sent in on or before the 6th of each month and the half yearly papers

are to be forwarded on the days above ordered and the other monthly papers may be sent in on any day before the 10th and the annual estimate of canals and bunds must be sent in on or before the 1st November of each year and the account must be made out for each Purgunnah separately.

Besides the above returns the Deputy Collectors will furnish monthly, on or before the 20th of each month, a casualty return of Jagheerdars holding Jagheers or residents in the Purgunnahs under their charge, giving the date of decease, number and age of sons, if any, and amount of land held by them and which has thus lapsed to Government and in what Purgunnah situated.

In consequence of the above additional duties thrown on the Deputy Collectors a new and more equal distribution of the several districts is necessary and the following new distribution of Purgunnahs is made in consequence :—

Halla district.

CAPTAIN ANDERSON.

Purgunnahs.

Chinejah.
Khittah and Dowlatpur.
Dinejah.
Munejah.
Kund Chakarwah.
Laikghee Mubarakwah.
Wunjaree and Dahlee.
Halla.
Katie Khanote.
Ali Bur Gessoomer.
Shahwah Lohana.

Mohomed Khan's Tandra.

CAPTAIN JONES.

Purgunnahs.

Sumawatee.
Oodajanee.
Hingoranee.
Kurbe Tickoor.
Syedpur Ludhan.
Chowdra.
Khuttar Ugamanee.
Kaskartyar.
Dundee Kokur.
Shahwah Mushrook.
Shahwah Magrubee.
Thole Danda.

Shahbunder.

LIEUTENANT JAMESON.

Purgunnahs.

Shahbunder.
Jatee.
Chejah and Suttah.
Mangur.

Meerpoor district.

LIEUTENANT FORBES
CAPTAIN DRUMMOND.

Purgunnahs.

Mattaree Kundoo.
Ali Burr Sangro.
Surfrazwah.
Imamwah.
Ropah Meerwah.
Nara Junagunee.
Umerkote.
Shahghur Khangurh.
Cammara.
Hoosree Bindo.
Katree and Sipea.
Allybar Khanwah.
Imamwah Peenoah.
Jooda.
Meerpoor.
Allayar and Nassarpur.

Almaka Gotee.

LIEUTENANT FENNING.

Purgunnahs.

Bunna Laikpur
Dutchur Wallishah.
Tye Mooradpur.
Keeral Kote Almah.
Runta Beila.
Dadooki Chowria.
Korwah Galai.
Bairampoor Seeranee.
Meerpoor Battora.
Dook Gaja.
Amrah Shah Kapoor.
Kuddee.
Lakat Meerwah.

Wunga.

G. WOOD, ESQUIRE.

Purgunnahs.

Dadwa Salar.
Beedino Kilro.
Mundhur.
Looharree.
Wallasa Kuddan.
Kolree.
Kuddera Khyrpoor.
Shahdeewah.
Wungakuk.
Chuchgaum.
Trinda Kashore.

HEADQUARTERS DIVISION.

Dooaba.

In carrying on the duties of their several districts the Deputy Collectors must follow entirely the several circulars or particular orders whether in English or Persian that may have been already or may be henceforward issued from the Collector's office but they will correspond direct with the Kardars and collect and be responsible for the revenues of their several districts. In order that the Collector may be entirely and immediately acquainted with every step taken by them, they will, besides the weekly diary in English forwarded to the Governor, transmit me daily, Persian copies of all letters received by them from the several Kardars during the day and their answers thereto as I send to them copies of such papers at present.

There are two kinds of cases regarding which no orders ought to be given without reference to me, claims to Jagheer and claims of Jagheerdars to water from the Government canals.

(Sd.) A. B. RATHBORNE,
Collector and Magistrate.

NO. 594 OF 1847.

COLLECTOR AND MAGISTRATE'S OFFICE,
Hyderabad, 9th July 1847.

MEMORANDUM.

The following alterations are made in the districts of this Collectorate:—

The Hoosree, Katree, Hingoranee, Oodajanee, Kurbee Tickoor, Khuttar Ugamanee and Kaskartyar Kardarates are attached to Hyderabad.

The Mattaree Kardarate is joined to Halla district.

The Dadwah Tellar, Buddino, Kolree, Kuddera Khyrpoor, Shahdeewah, Wungakuk, Chuchgaum and Binda Kathair Kardarates are joined to the Mohomed Khan's Tandra district.

The Tundee Kokur Kardarate is joined to the Laikpur district.

The Mundhur, Looharree, and Wallasa Kuddun Kardarates are joined to the Shahbunder district.

The necessary notifications to be made to Kardars and transfers made in the office papers.

(Sd.) A. B. RATHBORNE,
Collector and Magistrate.

Selections from the Records of the Commissioner in Sind.

SELECTIONS Nos. X and XI.

(1) Creation of the appointment of the Commissioner in Sind and his duties described, 1847.

(2) Annexation of the Province of Sind to Bombay Presidency, 1847.

L (IV) 355—45

NO. 3462 OF 1847.

Bombay Castle, 15th September 1847.

To

R. K. PRINGLE, ESQUIRE,
Bombay Civil Service.

SIR,

I am directed to inform you that in consequence of the approaching retirement of His Excellency Lieutenant-General Sir Charles Napier, G.C.B., from the Government of Sind, the Honourable the Governor in Council is pleased to appoint you Commissioner for the civil administration of that Province, from the date of His Excellency's departure, which this Government is best to believe will take place about the 23rd instant.

2. I am desired to transmit for your information and guidance copy of a letter from Mr. Elliot, Secretary to the Government of India, with the Honourable the Governor-General, dated the 25th ultimo containing an exposition of His Lordship's sentiments in regard to the mode in which the administration of Sind should be conducted pending the receipt of final instructions from the Home authorities.

3. In conformity with the wishes of the Right Honourable the Governor-General of India, communicated in the 4th paragraph of the above mentioned letter, Captain E. J. Brown, of the Bengal Engineers, is to continue to hold his present office of Secretary and, pending ulterior arrangements, no change should be made in any civil office.

4. It being deemed advisable that an officer should, for the present, be attached to you in the capacity of Assistant, the Governor in Council is pleased to appoint to that situation Lieutenant I. F. Lester, of the X Regiment, Bombay Native Infantry, and while so employed he will be permitted to draw the same amount of salary as he at present receives as an Assistant in the Deccan Revenue Survey.

5. Pending definite instructions from superior authority, the Governor in Council considers it unnecessary to give you any detailed instructions, but he would indicate that your duty, generally, as Commissioner in Sind, will be first to conduct the Government on its present footing, and second to collect the fullest possible information relative to the present condition of the Province and the system of administration now in force, to serve as a guide in hereafter determining on the future plan of Government.

6. It will occur to you that, for the attainment of this last mentioned object, it will be proper to direct your enquiries to the extent, population, revenue and resources of the several Territorial Divisions of Sind, the nature of the land tenures and the present system of revenue management, the Customs and all other branches of revenue, the general character of the people of Sind, and of the tribes on the Frontier, and the general tone of their feelings towards the British Government.

7. Your enquiries should also include the civil and criminal justice of the Province, and Police, and the efficiency or otherwise of the present system, the present establishments in the several departments, their sufficiency or otherwise for their objects and the advantages and disadvantages of their present organization.

8. It will further be requisite that your attention should be directed to the receipts and expenditure of the Government in all its branches, including not only its present but its past financial position from the period that this Province came under British rule.

9. The above heads are only enumerated to serve as a guide to some of the points on which it will be requisite that you should obtain the fullest information, since it will be advisable that your enquiries should be directed to all points which may appear to you essential for conveying such a view of the condition and resources of the country as will be requisite for this Government to possess for the purpose of giving effect to the measures which finally may be determined for the future administration of Sind.

10. It will no doubt occupy a considerable period before you will be able to obtain complete and accurate returns on the several points above indicated. You are therefore requested

to obtain in the first instance, information upon these points, in such a general way, as will supply the Honourable the Governor of Bombay, who proposes to visit Sind towards the close of the present year, with sufficient data there to form a judgment respecting them.

11. You will perceive from the 5th para. of Mr. Elliot's letter that the Right Honourable the Governor-General of India has now under consideration, in communication with Sir Charles Napier, the subject of the future military arrangements in Sind. Pending, therefore, a decision by His Lordship as to the mode in which the military arrangements are to be conducted, all matters of a military character should be conducted by the senior Military officer in the Province, all establishments and business of a strictly civil character being under your control and direction.

12. In your communications with Government you should address the Governor in Council direct, but your correspondence with your subordinates, or with other departments, should for the present be continued through the Secretary, Captain Brown.

13. The Governor in Council has not yet received any positive information as to the precise date of Sir Charles Napier's departure from Sind. But as it is directed in the 7th para. of Mr. Elliot's letter of the 25th August that the Civil Commissioner should proceed to Kurrachee in the vessel ordered thither to convey Sir Charles Napier to Suez, I am directed to request that you will embark in the Honourable Company's steamer " Moozufur " which is appointed for this service and which will leave Bombay on or about the 21st September in order that you may be ready to receive charge from His Excellency on his departure.

14. Pending a decision as to the amount of your salary as Commissioner in Sind you are authorized to continue to draw the same salary and allowances as you at present receive as Chief Secretary.

I have the honour to be,
Sir,
Your most obedient servant,

(Sd.) A. MALET,
Secretary to Government.

No. 2019.

Dated Simla, 25th August 1847.

To

THE SECRETARY TO GOVERNMENT OF BOMBAY.

SIR,

I am directed to intimate for the information of His Honour in Council that the Governor-General has received a letter from Lieutenant-General Sir Charles Napier, G.C.B., dated the 10th August, tendering the resignation of his office as Governor of Sind, on account of the state of the health of his family which has suffered severely during the present year.

2. The Governor-General in accepting Sir Charles Napier's resignation, regrets to lose the valuable services of so able and distinguished an officer; and His Lordship requests that His Honour in Council will cause a Government steamer to be prepared to take Sir Charles Napier and family from Kurrachee to Suez, with the necessary instructions for the Honours and Salutes to which the Lieutenant-General is entitled as Governor of Sind.

3. With regard to the arrangements to be made for the appointment of an officer to carry on the Government of the Province of Sind, I am directed to transmit for the information of the Honourable the Governor in Council, copy of the Governor-General's letter to the Court of Directors of the 18th September 1846, No. 7, conveying His Lordship's sentiments of the course that ought to be adopted on the departure of Sir Charles Napier. This letter has not as yet been answered by the Court, but the Governor-General has reason to believe that the decision of the Home authorities may be very shortly expected and His Lordship recommends that all questions pertaining to the salary of the Commissioner or Lieutenant-Governor may remain undecided for the present and any appointment be considered to be of a temporary character until the orders of the Home authorities have been received.

4. The Governor-General recommends that Captain Brown, the Secretary to the Government, should continue to hold his present office. His services, talents and zeal are highly valued by Sir Charles Napier and his loss at the present moment would, His Lordship thinks, be productive of public inconvenience.

5. The Governor-General is in communication with Sir Charles Napier with regard to the Military arrangements of the Province, the distribution of the troops and the strength of the forces to be retained in Sind for the year 1848. No immediate alteration being required, the Governor-General will communicate with His Honour in Council on this subject after he has received the Military Report from Lieutenant-General Sir Charles Napier and His Honour in Council can then in consultation with His Excellency the Commander-in-Chief, Lieutenant-General Sir W. Cotton, make such arrangements in concert with the Governor-General as may be deemed to be most expedient during the approaching cold season.

6. The Governor-General is of opinion that it will be conducive to the public interests as well as to the facility of carrying on for the future the Government of Sind after it has been annexed to the Bombay Presidency, that His Honour the Governor should visit the Province in the end of the present year at the most favourable season. His Lordship is convinced that 2 or 3 months can be most profitably spent by His Honour in making himself acquainted with the local peculiarities of the Province, the state of the various departments as they now exist, the system pursued in the collection of the revenue, that of the Custom and Judicial Department, and on all points on which, as Governor of Bombay, His Honour's decisions will eventually have to be given, when the Province is to be governed by orders sent direct from Bombay. The Governor-General can devise no plan so likely to result in assisting the Bombay Government to govern the country successfully, as that of availing itself of the talents, zeal and energy of His Honour the Governor Mr. George Clerk in conducting the internal enquiries here recommended. His Honour would have the advantage of seeing everything with his own eyes, and will be invested with full authority whilst he is on the spot, to make

such arrangements as the altered state of affairs may require after the Province has lost by the departure of Lieutenant-General Sir Charles Napier, a public servant, who combined rare abilities for the civil and military administration of the country, and whose presence in recollection of his military achievements was calculated to ensure tranquility by overawing the turbulent portion of the frontier population.

7. His Excellency Sir Charles Napier proposes to embark early in September, which will afford sufficient time for His Honour in Council to make every necessary preparation, of a temporary character, causing the individual selected by His Honour in Council in the first instance to carry on the Provincial Government of Sind, to proceed there in the same vessel which is destined to take His Excellency to Suez.

8. The questions relating to the mode in which the Province is to be annexed to the Bombay Government being now before the Home authorities, the Governor-General deems it unnecessary, as their decision will be shortly expected, to enter into further details on this subject.

I have, etc.,

(Sd.) H. M. ELLIOT,

Secretary to the Government of India
with the Governor-General.

No. 7 of 1846.

FOREIGN DEPARTMENT,

Simla, 18th September 1846.

To

THE HONOURABLE THE COURT OF DIRECTORS.

HONOURABLE SIRS,

I have to acknowledge your Honourable Court's despatch No. 19 of 24th June 1846 in which you refer to a former communication of the 5th June 1844, No. 22, addressed to the Governor-General in Council, which states that whilst your Honourable Court adheres to your former opinions regarding the proceedings in Sind, you will not issue any instructions for the guidance of the Governor-General in Council with respect to the affairs of Sind, which have hitherto been conducted by the Secret Committee, satisfied that the best insterests of the State will be consulted in any proposals which may be made for the future management of Sind; and the despatch concludes by expressing an anxious hope that all practicable measures may be adopted for ameliorating the condition of the Ameers.

2. The more recent despatch of your Honourable Court expresses your trust that the Governor-General in Council will be enabled to frame for your consideration a definite plan for the future management of Sind.

3. With regard to arrangements which will be best adapted for the future management of Sind, I am of opinion that the whole of that Province ought to be annexed to the Presidency of Bombay, that the troops and all the establishments, both Civil and Military, should be furnished by, and committed to the charge of, the Governor in Council of that Presidency. That so long as Major-General Sir Charles Napier continues

to exercise the civil and military duties of the Government and the Command of the Forces in Sind, it will not be advisable to make any change in a country recently subdued.

4. Great advantage has attended the union of the two appointments of Governor and Commander of the Forces in Sind. A warlike military people are more likely to be disposed to obey the chief who conquered them than any other public officer who may be selected by the Government.

5. This opinion is limited to a state of affairs such as that which has existed in Sind since I arrived in India. The state of the Province during the years 1844 and 1845 could not with advantage have admitted of the annexation of Sind to the Presidency of Bombay.

6. The Government of India could not have selected during the last three years a more efficient officer than Major-General Sir Charles Napier for the duties he so ably performs in Sind. On public grounds therefore there has been no occasion on which I could, with benefit to your Honourable Company's Service, have recommended any better plan for the administration of Sind than the present.

7. In the letter addressed to your Honourable Court dated 2nd May 1845, No. 22, on the subject of retransferring Cutch to the Bombay Presidency, the Governor-General in Council assumed that Sind would ultimately be annexed to Bombay and gave his reasons why he was averse to disturbing any part of the existing arrangements until a settlement of the whole question could be finally carried out into effect.

8. Assuming that the state of affairs in the Punjab and in Sind are now sufficiently disclosed and have arrived at such a settled state of tranquility and order as to justify me in recommending a system for the future management of Sind, I would observe to your Honourable Court that there are reasons of a personal nature affecting Major-General Sir Charles Napier which would make me prefer the postponement of any alteration so long as Sir Charles remains at the head of affairs in Sind, conducting his duties under the Government of India.

9. It can scarcely be expected that such a change would be acceptable to him and I do not perceive any advantage to your Honourable Court's service by substituting the authority of a subordinate for that of a supreme Government so long as the Major-General remains in Sind.

10. Whenever Sir Charles Napier may retire, I should immediately recommend the annexation of the whole of Sind to the Bombay Presidency, selecting the most able Civil Officer in the Presidency as the Commissioner aided by an active and judicious Military officer.

11. The Revenue Administration, the Police and Internal affairs of the country as well as the Political affairs on the Frontier would be committed to the Civil Commissioner in the same manner as in our other Indian Provinces.

12. The administration of Justice as regards criminal cases would be open to consideration. The view taken by the Governor-General in Council on this subject is recorded in a letter to the Secret Committee of September 14th, 1844, and approved by the Secret Committee on 4th December 1844.

13. I do not understand that your Honourable Court's letter of the 5th June requires me at the present moment to give more than the foregoing general outline of my opinion.

14. In authorising the Bombay Army last spring to be augmented by three regiments of Native Infantry under the discretion vested in me by your Honourable Court, I withdrew the Bengal troops from Sind. This augmentation was given in substitution of the Bengal troops permanently withdrawn and not because I considered that the Bombay Army required on other grounds that augmentation—thus gradually preparing for the annexation of the whole Province to the Bombay Presidency whenever the distinguished officer now at the head of the Government of Sind may retire.

15. With regard to the treatment of the *ex*-Ameers of Sind your Honourable Court will find from despatches addressed to the Secret Committee and specially one of date August

14th, 1846, that every possible consideration has been shown at all times to them and that no opportunity has or will be lost of ameliorating their condition and of conciliating their feelings.

16. In December 1845, I suggested to the President of the Council, that they should be put on the same footing as the Mysore Princes and I am well aware that his honour has omitted no pains to render their position as agreeable to them as under their circumstances it can be made.

I have the honour, &c.,

(Sd.) HARDINGE.

True copy.

(Sd.) A MALLET,
Secretary to Government.

True copy.

(Sd.) H. M. ELLIOT,
Secretary to Government of India,
with the Governor-General.

No. 2043.

FOREIGN DEPARTNENT,

Simla, the 31st August 1847.

To

CAPTAIN E. I. BROWN,

Secretary to the Government of Sind.

SIR,

I am directed to transmit to you the accompanying General Order by the Right Honourable the Governor-General with a request that you will cause it to be issued the day that Lieutenant-General Sir Charles Napier, G. C. B., embarks from Kurrachee for Aden and not before that period, nor will you allow the order to transpire before it be issued.

2. Should any officer be deputed from the Bombay Government to take charge of the Government of Sind on Sir Charles Napier's departure you will of course apply for your superior officers' instructions before you issue the orders.

I have, &c.

(Sd.) H. M. ELLIOT,

Secretary to the Government of India,
with the Governor-General.

General orders by the Right Honourable the Governor-General.

Simla, 1847.

His Excellency Lieut.-General Sir Charles Napier, G. C. B., having tendered to the Right Hon'ble the Governor-General of India his resignation of the office of Governor of the Province of Sind, His Lordship desires to express the regret he feels in losing the services of so distinguished and valuable an officer.

The Governor-General most cordially acknowledges the sense he entertains, of the just, firm and able manner in which His Excellency has conducted the Civil administration of the Province entrusted to his charge. This important and difficult duty has been performed with an ability which justifies the unlimited confidence which His Lordship has reposed in Sir Charles Napier, a name gloriously pre-eminent as the Leader of the Forces which achieved the victories of Meanee and Hyderabad.

The Lieut.-General will after a long, brilliant and honourable career in the public service retire from Government of Sind, having in the course of his service in India received the approbation of the Government he has served, the thanks of the British Parliament and been honoured by a distinguished mark of his Sovereign's favour.

By order of the Right Honourable the Governor-General,

(Sd.) ELLIOT,
Secretary to the Government of India,
with the Governor-General.

NO. 2788 OF 1847.

Kurrachee, 1st October 1847.

To

COLONEL THE HONOURABLE H. DUNDAS, C.B.,

Commanding the Forces in Sind.

SIR,

I am directed to inform you that, consequent on the departure of His Excellency Lieut.-General Sir Charles Napier, late Governor of Sind, Robert Keith Pringle, Esquire, having been appointed by the Honourable the Governor in Council of Bombay, under instructions from the Right Honourable the the Governor-General of India, Commissioner for the civil administration of Sind, had this day assumed charge of that office.

2. I am at the same time directed by the Commissioner to transmit for your information extract paras. 11 and 12 of a despatch No. 3462, dated the 15th ultimo, from the Secretary to the Government of Bombay in the Political Department and to request you will have the goodness to take such steps as you may consider requisite for making known to the officers and soldiers under your command the new modification under which the Government of the Province is now to be administered.

I have, &c,

(Sd.) E. I. BROWN,
Secretary to the Government of Sind.

Circular to the Heads of Civil Departments in Sind.

No. 2789 of 1847.

Kurrachee, 1st October 1847.

To

THE COLLECTOR OF SHIKARPUR AND OTHERS.

SIR,

I am directed to inform you that consequent on the departure of His Excellency Lieutenant-General Sir Charles Napier, G.C.B., late Governor of Sind, Robert Keith Pringle, Esquire, having been appointed by the Honourable the Governor in Council of Bombay under instructions from the Right Honourable the Governor-General of India, Commissioner for the civil administration of Sind, has this day assumed charge of that office.

2. Under the new modification according to which the Government of Sind is now to be administered, all matters of a military character will be conducted by a Senior Military Officer in the Province and all establishments and business of a civil character will be under the control and direction of the Commissioner.

3. You will continue to address official communications relative to the business of your Department, as heretofore, to the Secretary to Government of Sind, by whom they will be laid before the Commissioner.

4. You are requested to make known the purport of these instructions to the officers under your control.

I have, &c.,

(Sd.) E. I. BROWN,

Secretary to the Government of Sind.

No. 2790 of 1st October 1847 to the address of Collector of Hyderabad.

No. 2791 of 1st October 1847 to the address of Collector of Kurrachee.

No. 2792 of 1st October 1847 to the address of Collector of Customs, Kurrachee.

No 2793 of 1st October 1847 to the address of Offg. Captain of Police, Sind.

No. 2794 of 1st October 1847 to the address of Resident, Khyrpoor.

No 2795 of 1st October 1847 to the address of Civil Judge Advocate-General in Sind.

No. 2796 of 1st October 1847 to the address of Political Agent, Cutch.

No. 2797 of 1st October 1847 to the address of Treasurer in Sind.

No. 2798 of 1st October 1847 to the address of Superintendents of Canals and Forests in Sind.

No 2799 of 1st October 1847 to the address of Superintendent Indus Flotilla.

No. 2800 of 1st October 1847 to the address of Superintendent, Boat Department, Kotri.

No. 2801 of 1st October 1847 to the address of Superintendent, Boat Department, Sukkur.

No 2804 of 1847.

Kurrachee, 1st October 1847.

To

The Honourable George Russel Clerk,

Governor and President in Council Bombay.

Honourable Sir,

I have the honour to inform you that I arrived off Kurrachee harbour on Board the 'Moozuffer' steamer on the forenoon of Thursday, the 23rd ultimo, and landed the following day, since which time I have been residing with His Excellency, the late Governor Sir Charles Napier, and had opportunities of receiving from him in personal conference, such information or suggestions as he wished to communicate, relative to the affairs of Sind.

2. His Excellency and family embarked on Board the Moozuffer' for Suez this morning and I have caused it to be intimated to the authorities in the Province that I have assumed charge of the civil administration in pursuance of the commission received from your Honourable Board.

3. In conformity with my instructions, I shall lose no time in taking the necessary steps for procuring information as to the condition of this Province and the mode of its administration, and pending ulterior arrangements, shall conduct the Government as nearly as practicable on its present system. In order however that your Honour in Council may in the meantime have some general conception of what that system is I shall proceed at once to submit a cursory sketch of it, in as far as I have been able to gather it from the officers with whom I have as yet come into communication.

Revenue.

4. The Province is divided into three Collectorates, the upper that of Shikarpoor in which are a Collector and 5 Deputies, the central that of Hyderabad in which are a Collector and 7 Deputies and the lower that of Kurrachee in which are a Collector and 3 Deputies. Under these are Kardars or Tahsildars answering to the

Mamlatdars in the Bombay Presidency with their several establishments of writers, peons The revenue is for the most part settled in kind, but a small portion in money. In the former the maximum Government share has been limited to ⅓ of the gross produce; all extra cesses and all transit and town duties and personal taxes have been abolished A uniform land measure and uniform weights and measures generally, also the Company's silver and copper currency have been introduced, (no remissions are granted and loans in the shape of Taccavi are made with caution.) There are no hereditary district or village establishments. The details of management are settled between the cultivators and the Kardars without much intervention on the part of the European officers. The Government share of the revenue in kind is sold by contract and the proceeds realized by instalments, generally about a year in arrear of the sales. Defalcations occasionally occur but are not frequent. There is a considerable quantity of land under life alienation but little under hereditary alienation. The grants are almost entirely personal, few or none religious or charitable and none for district or village service; there are no money assignments on the revenue. All Jagheerdars who submitted to Government on or before the 24th May 1844 (the period when Sir Charles Napier summoned them to a general Congress) have had their existing rights guaranteed. No lists were taken of such Jagheerdars at the time on which entire dependence can be placed but their names were hastily taken down by Sir Charles Napier's Moonshee. Each individual however received a document under the signature of Sir Charles Napier, and on these being subsequently presented in support of claim the original deed and proofs of the then existing rights have been investigated by the Collectors and statements of them submitted for the confirmation and seal of the Governor. It is presumed that in this way the greater portion of such claims must, by this time, have been disposed of. The canal department, which is considered of vital importance to the Revenue, is directed by a Superintendent with large establishments both European and Native, under his orders. He has also the superintendence of the forests. The chief duty of this department has hitherto been clearing out the old feeding canals; the past year has shown that a very large outlay is

called for ere the ryots can be expected to cultivate with confidence. A survey was also to have been undertaken by this Department, but it has for the present been postponed, under orders from the Supreme Government, to the more pressing duty of clearing the canals. Lands irrigated by the canals are charged with a water rent in addition to the ordinary land assessment. The customs are managed entirely in conformity with the Bombay Regulations and Tariff. The neighbouring foreign states have without exception been declared "foreign" for the purpose of the customs revenue and the trade across the land frontier restricted to prescribed routes and subjected to frontier duties. The sea customs are collected by a Collector of Customs, the land custom by the Collector of Land Revenue. No excise on spirits has been generally established but a partial measure of the kind has been experimentally introduced. A revenue is also derived from fisheries. Five per cent. is levied on the amount of civil suits from the party against whom costs are adjudged. These together with Post Office receipts, fines, escheats and extraordinaries appear to constitute the sources of revenue. The receipts last year are stated to have amounted to Rs. 26,40,801 and the revenue due on account of the value of grain and hoondies outstanding to Rs. 13,53,408 which would make a total of about 40 lacs but this partially includes revenue due for the preceding year also and revenue extraordinary, so that the ordinary revenue for that year may perhaps not have exceeded 30 lacs. Diaries of proceedings are periodically submitted by Collectors, but no annual reports on the revenue and state of their districts.

Civil justice.

5. Civil justice is administered by the Collectors and their Deputies or by Panchayats under their superintendence but chiefly by the latter process. The records of proceedings are retained in the offices of Collectors and monthly returns showing the names of the parties, the nature and amount of the suit, the substance of the decree and the amount of cost are forwarded by those officers for the information of the Governor through the Judge Advocate. Appeals have not been systematically admitted, but on a petition being made to the Governor against a decree.

If on the face of the case he saw reason for interference, he directed the proceedings to be revised by a Military Commission. At present, there is little information before Government of the details of the administration of Civil Justice, beyond what may be gathered from the monthly returns.

Agency for the administration of Justice and Police.

6. The agency for administration of civil and criminal justice and Police consists (1st) of an officer, designated "Civil Judge Advocate General" with two deputies—the Judge Advocate-General is stationed at Kurrachee and the Deputies at Shikarpoor and Hyderabad—their functions are to direct and revise judicial proceedings and the Judge Advocate to act generally as a Judicial Advisor to the Governor; (2nd) the Collectors and Deputies who are also Magistrates; (3rd). The Captain and 3 Lieutenants of Police who have the control and direction of the Executive Police and are also Magistrates; the Captain having a general jurisdiction, the Lieutenants within the three territorial divisions respectively; (4th) Military Commissions each consisting of 3 officers furnished by the nearest Commanding Officer on the requisition of the Magistrates.

Criminal Justice.

7. Criminal Justice is administered primarily by the Collectors and their Deputies as Magistrates and by the Captain and Lieutenants of Police as Magistrates, both classes of officers having concurrent jurisdiction within their respective limits, but being independent of each other. Offences have been classified with reference to their atrocity or their character as bearing on the state of society and a scale of punishments established. Minor offences are tried by Magistrates and their Deputies or the Captain of Police and his Lieutenants and the sentence at once carried into effect under the orders of the Trying officer. In those of a more serious nature, the proceedings of the subordinate officers are forwarded to his Principal who submits them, with his opinion, to the Judge Advocate for his confirmation. In the most serious class of offences, including those involving capital punishments, the Magistrates commit the accused for trial before a Military Commission. The proceedings

of Military Commissions are conducted at the outstation by the Deputy Judge Advocate and at Kurrachee by the Judge Advocate-General and on conclusion are submitted by the latter officer for the orders of the Governor. The principal crimes are cattle and camel stealing, and murder arising out of cases of adultery, but the latter are less frequent than they were. The punishments are fine, imprisonment with or without hard labour, flogging, transportation and death. In the case of extreme punishments the sentences are carried into effect only under the orders of the Governor. Monthly returns of cases within the final jurisdiction of the Magistrates showing the nature of the offence, proof and sentence are forwarded for submission to the Governor. Trials not requiring the confirmation of superior authority are recorded in Persian and the records kept in the offices of the Magistrates. Those requiring confirmation are recorded in English and the records kept in the office of the Judge Advocate. All matters of a judicial or Magisterial nature requiring the Governor's orders are transmitted for submission through the office of the Judge Advocate. There are Jails at each of three stations, their control and management is under the exclusive direction of the Captain of Police and his Lieutenants.

Police.

8. The Police force consists of—

Mounted Police of all rank ...	838
Rural	896
City	476
	2,210

They are commanded by and under the exclusive direction and control of the Captain and his three Lieutenants and posted in the manner best calculated to secure the peace of the country and provide for the various Jails guards and other civil duties. To the Captain of Police is entrusted the internal tranquility of the Province beyond the Military posts. It is the duty of the officers of Police to make themselves acquainted with the character of the population and to adopt every means for obtaining the earliest intelligence of anything likely to

affect the public peace and give immediate information of it to the Governor. There appears to be no professional Local Police, but there are trackers in every village who are said to be very expert in tracing robberies and it is the established rule that all the inhabitants of a village should afford every information and assistance to the Police in the pursuit and apprehension of offenders, any neglect of which is punished with fine.

Political administration.

9. Military officers at outposts and in command of forces at remote stations, have I understand occasionally been in the habit of exercising a discretionary power in adopting such measures for the protection of the frontier against the Hill tribes as the exigencies of the service might appear to them to require and reporting direct to the Governor. Our Political relations with His Highness Meer Ali Morad Khan are conducted by the Resident at Khyrpoor and those in Cutch by the Resident there, both of whom communicate with Government through the Secretary.

Finance.

10. There is a General Treasurer for the Province who has his Treasury at Kurrachee. He supplies the wants of the Military Paymaster at Kurrachee and the officers in charge of Military Treasuries at Shikarpoor and Hyderabad. All departments except Collectors draw funds from him. He cashes all bills or receipts countersigned by the Governor, submits his accounts direct to Calcutta and receives instructions therefrom, draws bills on all Treasuries in India subject to the orders of the Accountant-General, at Fort William. His Treasury is supplied by such Bills, by the surplus revenue of the Collectors of Land Revenue and Customs and if requisite, by cash remittances from Bombay, but chiefly from the first of these sources. He forwards to this Government a monthly cash balance Return, which together with those of 3 Military Treasure Chests are forwarded to the Government of Fort William and Bombay. The Treasurer and Collectors forward their accounts direct to the offices of Audit and Account in Calcutta and they are adjusted through those offices without any communication with this Government. It is understood that there is at

present a large amount of inefficient balance awaiting final audit. All estimates of prospective resources and liabilities as well as all general statements of receipts and disbursements are framed under instructions from the office of Account at Calcutta and submitted through it, so that this Government has no direct information of its financial position, beyond what it may possess from such casual statements as it may have especially called for. But if any requisition is made by the Government of India for the general returns financial or other, out of the ordinary course, they are prepared in the office of the Secretary to the Sind Government. The monthly charge on account of civil salaries and establishments as it stood at the commencement of the present official year amounted to Rs. 64,547.

Appointments.

11. All appointments of officers in the Civil Department have been made by the Governor subject to the confirmation of the Supreme Government.

12. The above is a hasty sketch of the system of Government now prevailing. I cannot answer for its being strictly accurate in all its details, but I believe it to be sufficiently so to give your honour in Council a pretty correct general notion of its character and thereby to facilitate your deliberations in regard to any immediate instructions which you may deem it necessary to issue for my guidance. I do not perceive any very serious practical difficulty in conducting the Government on its present footing until ulterior arrangements can be made. The separation of the Civil and Military authority may perhaps occasion some embarassment and necessitate a resort to anomalous expedient at first, but I will do my best to prevent the public service from sustaining any avoidable inconvenience from this cause, and in this, I have no doubt, I shall have the cordial co-operation of the Officer Commanding the Forces. One of the first points in the present system in which you may probably deem it expedient to direct some alteration, and this anterior to any more extensive changes to be eventually introduced, is the substitution of some other agency for that of Military Commissions in the administration of Justice,

such an agency being obviously unsuited to a Civil Government. It occurs to me that a model for immediately effecting such a change might be found in the system in force in the Deccan under the sole Commissioner, the Hon'ble Mr. Elphinstone, on our first acquisition of that country. The exisiting civil agency there is nearly analogous to what then subsisted there, and might I think without difficulty or objection be charged with the performance of the same duties until a more regular system can be introduced. I have not the details of that system as respects the extent of power and character of the duties assigned to the respective functionaries, to refer to, but they must be on the records of the Bombay Government.

13. Some early change may also be requisite in regard to the discretion which Military officers exercise in the direction of proceeding on the frontier as regards their political bearing. In such cases it may be advisable to transfer the political direction of affairs, except in cases of emergencies calling for immediate action, to the Collectors as Political Agents under the general control of the Commissioner, the conduct and responsibility of military operations in carrying out political measures resting of course with the Military officers. But I am unwilling to introduce any changes in this respect until I see my way before me, and am better acquainted with the working of the present system and the nature of the exigencies to be provided for. I therefore merely notice the point at present that it may receive the consideration of your Honourable Board.

14. Should any vacancies occur in civil appointments, delay in filling up which might subject the public service to inconvenience, I will at once take upon me to appoint officers to fill them subject to the confirmation of your Honour in Council.

15. Some establishment of peons, &c., immediately about my person will be required to supply the place of those which Sir Charles Napier had in his Military character from the Military Department and which will now be withdrawn. These

and any other changes of immediate and obvious necessity I will order to be incurred in anticipation of the sanction of your Honourable Board to whom they will in due course be reported.

I have, &c.,

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

P. S.—I would take this opportunity of requesting that I may be furnished with a statement of the charges on account of civil establishments under the Bombay Presidency with a view to assist me in framing a comparative estimate of the charges on the same account in this Province.

(Sd.) R. K. PRINGLE.

No. 2806 of 1847.

Kurrachee, 2nd October 1847.

To

THE HONOURABLE GEORGE RUSSEL CLERK,
Governor and President in Council, Bombay.

SIR,

In transmitting for the information of your Honourable Board and for such further proceedings as you may think proper to adopt in reference to it, the accompanying copy of a letter No. 2043, dated the 31st August last, from the Secretary with the Right Honourable the Governor-General, forwarding for publication an order on the occasion of the retirement of His Excellency Lieutenant-General Sir Charles Napier from the Government of Sind, I have the honour to report for the information of your Honour in Council that in pursuance of His Lordship's instructions I have directed copies of the above order to be communicated to the Heads of Civil Departments in this Province and also to the Officer Commanding the Forces with a request that he will take the necessary steps for making it known to the officers and troops under his command.

I have the honour to be,
Sir,
Your most obedient servant,

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

NO. 4031 OF 1847.

Dated 22nd October 1847.

To

R. K. PRINGLE, ESQUIRE,
Commissioner in Sind.

SIR,

I am directed by the Governor in Council to transmit for your information and guidance, copy of a letter from Mr. Elliot, Secretary to the Government of India with the Right Honourable the Governor-General, dated the 30th ultimo, No. 2329, approving the instruction issued to you on the 15th ultimo, and containing a further exposition of His Lordship's views in regard to the future administration of Sind.

I have, etc.,

(Sd.) A. MALLET,
Chief Secretary.

No. 2329.

Simla, the 30th September 1847.

To

THE SECRETARY TO GOVERNMENT,
Bombay.

SIR,

I have received and laid before the Right Honourable the Governor-General your despatch No. 249, dated the 15th instant, with its enclosures, and am directed in reply to state that His Lordship approves of the measures adopted by the Honourable the Governor in Council for carrying into effect instructions contained in my letter of the 25th ultimo No. 2019.

2. His Lordship takes it for granted in reference to the 4th para. of the instructions given to Mr. Pringle, that it is not intended in affording to the Commissioner temporarily the services of an Assistant Commissioner, that that officer should, in the event of the sudden illness or coming away of the Commissioner, succeed Mr. Pringle in his Civil and Political functions. These will devolve on the senior Civil Officer in the Province who will not have the power during his temporary occupation of office of issuing any instruction to the Commanding Officer respecting the movements of troops.

3. In reference to para. 3 of the instructions above alluded to, I am directed to observe that the object in recommending that Captain Brown's services should be retained was that the Commissioner should have the benefit of the experience of an officer through whom for 5 years all the orders of His Excellency Sir Charles Napier had passed and who from his confidential situation, possesses an intimate knowledge of the Lieut. General's views as to the Civil and Military administration of Sind.

4. With regard to the 5th para. of my letter of the 25th August, recommending that His Honour the Governor of Bombay should proceed to Sind towards the end of this year,

you will observe that it was there expressly stated that His Honour ought to proceed after the Province of Sind shall have been annexed to Bombay, in order that all doubt might be avoided as to the authority of the Governor of Bombay, when visiting a Province beyond the limits of Bombay Presidency. Before His Honour can be required to proceed to Sind the sanction of the Court of Direotors to the annextion of Sind to Bombay will probably have been received by the Government of India, unless the delay, which has occurred in expediting the Governor-General's despatches to England, should retard the Court's answer.

5. In reference to the 11th para. of the instructions to Mr. Pringle, I am directed to forward copy of a memorandum transmitted by the Governor-General to His Excellency Sir Charles Napier on the 15th July last, the day on which His Lordship received intimation (although not officially) of the probablity of Sir Charles Napier's retirement from the Government of Sind. In that memorandum His Lordship requested His Excellency's sentiments as to the numbers and distribution of the army and other matters connected with the Military arrangements for Sind. His Excellency may, before this letter reaches Bombay, have sent a copy of his answer to the memorandum, for the information of His Honour in Council. As soon as the answer in question is received by the Governor-General, His Lordship will address the Bombay Government on the subject.

I have, &c.,

(Sd.) H. M. ELLIOT,
Secretary to Government of India
with the Governor-General.

COPY.

Memorandum by the Governor-General of India.

Simla, 15th July 1847.

The period of the year for taking into consideration the annual relief of troops having arrived, I have to request His Excellency Lieutenant-General Sir Charles Napier will report upon the force which he proposes to maintain in Sind for the year 1848.

If the state of Sir Charles Napier's health will permit of his remaining in charge of the Government and of the army, during the year 1848, I should be disposed to accede to a further diminution of Force in Sind, but if, as I fear, His Excellency's health should have become so impaired by climate as to induce him to return to Europe, after an arduous and successful service of 5 years in Sind, I should in such case not be disposed to consent to any material diminution of the force during the year 1848.

It is impossible for the Government to exclude from its consideration the moral effect which must be produced by a change of masters over the feelings of a warlike and excitable people recently conquered. The name and presence of the conqueror of Meanee and of Hyderabad, does constitute in this sense a portion of our means in securing peace and order and it has a value which is appreciated by me and must be computed in determining the numbers and the distribution of the force whenever the Lieutenant-General retires from Sind. The Bombay Presidency is most amply provided with troops of every description and it is therefore unimportant whether 3 Regiments of Native Infantry, more or less, be retained in Sind, the only additional expense to be incurred being that which arises out of the extra pay and allowances to these three Regiments whilst serving beyond the Bombay Presidency, and this expenditure is not to be compared to the advantage of being at all times in a perfect state of preparation on that frontier,

Sir Charles Napier will therefore be so good as to report for my information, the distribution of the various arms at each station throughout the Province and the numbers of each garrison, which he is of opinion ought to be ready to move at the shortest notice. For instance at the large stations such as Kurrachee, Hyderabad and Shikarpoor a portion of each garrison will under any circumstances remain in charge of the place—the moveable portion kept in readiness to march at the shortest notice will be specified, with the means of transport ordered to be kept up at each station, including all the camp followers required for such a moveable portion of the force when it does take the field.

I should also desire to have a return with explanatory remarks of the Ordinance and Commissariat stores now retained in the Province of Sind, the quantity of musquet ammunition in reserve and in what depôts, exclusive of the usual proportions in charge of each Regiment.

A similar return as regards the Field Batteries of Artillery specifying the number of rounds for each gun which would be taken into action under the immediate charge of the officer commanding the Field Battery, the mode of transport, the number of ammunition, waggons for each Battery (say six and 9 founders), the reserve ammunition for each field gun, not in charge of the Captain of the Battery on the line of march, the mode of transport and the system established for ensuring a ready supply, specifying as before required, the number of rounds for each gun always in charge of the Captain of the Troop or Battery. Secondly the Reserve the nearest at hand and thirdly the number of rounds for each field gun in each magazine and Depot throughout the Province. A return to be sent in of the seige Artillery and proportion of ammunition as well as all the Engineering Stores, stating the magazines in which they are deposited.

I should also be glad to have Sir Charles Napier's opinion as to the expediency of converting the Island of Bukkur into a keep or magazine, in which Ordinance and Military stores could be safely lodged. The smallest permanent garrison which the

defence would require with any information as to the salubrity of the post at various periods of the year, and generally speaking whether there are any other points which in His Excellency's opinion ought to be secured by the Military works, bearing in mind the general principle that the Military policy of this great Empire is an aggressive and not a defensive system and that it is most undesirable, except for the purpose of securing stores, to disperse and lock-up troops in defensive posts

I am also desirous of having His Excellency's opinion as to the value to be attached to the Steam Flotilla on the Indus, as connected with the defence of the country, either in expediting the movement of the troops or in the saving of expenditure by the transport of troops and stores in peace and war.

Sir Charles Napier has paid the greatest attention to the health of the troops in Sind. I shall be obliged to him for the fullest information on the point stating the months of the year when movement of troops ought most to be avoided.

On all these matters connected with the occupation of Sind, His Excellency will exercise his discretion in affording the fullest information, which proceeding upon his professional ability and local experience, cannot fail to be of great value for the guidance of his successor.

(Sd.) HARDINGE.

True copy.

(Sd.) H. M. ELLIOT,
Secretary to the Government of India,
with the Governor-General.

True copy.

A. MALLET,
Chief Secretary.

L (IV) 355—49

No. 4128 of 1847.

Bombay Castle, 29th October 1847.

To

R. K. Pringle, Esquire,
Commissioner in Sind.

Sir,

With reference to my letter No. 4031, dated the 22nd instant, I am directed by the Honourable the Governor in Council to transmit to you the accompanying copy of one No. 287, I have this day addressed to the Secretary to the Government of India with the Right Hon'ble the Governor-General, in reference to the appointment of your Assistant, Lieutenant Lester.

I have, etc.,

(Sd.) A. MALLET,
Chief Secretary.

NO. 287 OF 1847.

Dated the 29th October 1847.

To

H. M. ELLIOT, ESQUIRE,
Secretary to the Government of India,
with the Right Hon'ble the Governor-General.

SIR,

I am directed to acknowledge the receipt of your letter No. 2329, dated the 30th ultimo, approving of the measures adopted by the Hon'ble Governor in Council consequent on the instructions communicated in your letter of the 25th August last, No. 2019 and to state for the information of the Right Hon'ble the Governor-General of India, that a copy of your communication under acknowledgment has been furnished to the Commissioner in Sind for his information and guidance.

2. With reference to the remark contained in your para 2 I am desired to explain, that in appointing Lieutenant Lester, Assistant to the Commissioner, it was from the first intended that that officer should serve only in a confidential capacity, similar to that of Private Secretary, that this Government never contemplated his carrying on the duties or taking charge of the office of Commissioner in the event of Mr. Pringle's absence and that Mr. Pringle was made fully aware of this when directed by the Honourable the Governor to select a young officer for the confidential duties adverted to; and I am further desired to explain for his Lordship's information that the only reason for designating the latter officer as Assistant, was, that His Honour in Council considered the designation as more appropriate than that of Private Secretary to a Civil Commissioner.

I have, etc.,

(Sd.) A. MALLET,
Chief Secretary.

True copy.

(Sd.) A. MALLET,
Chief Secretary.

NO. 4122 OF 1847.

Dated the 29th October 1847.

To

R. K. PRINGLE, ESQUIRE,
Civil Commissioner in Sind.

SIR,

I am directed by the Honourable the Governor in Council to acknowledge the receipt of your letter No. 2804, dated the 1st instant, reporting your arrival at Kurrachee on the 24th of the preceding month and submitting a hasty sketch of the system of Government now prevailing in Sind.

2. In reply and with reference to paras. 9 and 13 of your letter, I am desired to inform you that so far from the Government wishing you to make any alteration which may at all weaken the powers now exercised by the officers on the Frontier, before you are fully acquainted with the working of the present system and the nature of the exigencies to be provided for, the Governor in Council is prepared to approve of your strengthening the authority of those officers, if you and Brigadier Dundas deem the doing so necessary to the proper protection of the country.

3. I am instructed to request that you will at your leisure report particulars regarding the inefficient balance alluded to in the 10th para. and that you will call upon all the local authorities in charge of treasuries to look to any inefficient balance, which their accounts may exhibit, with a warning that, they will be held responsible for every such item until sanctioned and passed by sufficient vouchers into the body of their accounts.

4. I am further desired with reference to para. 12 to inform you, that the Government is fully satisfied that you and Brigadier Dundas will do you best to prevent the public service from sustaining any avoidable inconvenience from the separation of civil and military authority.

5. In compliance with your request contained in the same para. I am instructed to forward copies of the documents mentioned in the annexed list, containing the details of the system in force in the Deccan under the Honourable Mr. Elphinstone on the first acquisition by the British Government of that country—some further papers containing information on the same subject will be sent to you as soon as copies can be made of them.

6. The Governor in Council approves of your anticipating the sanction of Government to the arrangements alluded to in paras. 14 and 15 of your letter and desires me to state that the Civil-auditor has been instructed to furnish you with the information applied for in the postscript of your letter.

I have, etc.,

(Sd.) A. MALLET,
Chief Secretary.

No. 3574 OF 1847.

Kurrachee, 22nd November 1847.

To

THE HONOURABLE GEORGE RUSSELL CLERK.

HONOURABLE SIR,

I have the honour to acknowledge the receipt of Mr. Chief Secretary Mallet's letter No. 4031 of the 22nd ultimo and enclosures containing an exposition of the Right Honourble the Governor-General's views in regard to the future administration of Sind.

On reference to the 5th paragraph of Mr. Secretary Elliot's letter No. 2329 it would seem that the Right Honourable the Governor-General expected that copy of Sir Charles Napier's Report on Sind would have been communicated officially by His Excellency to the Bombay Government. A copy of His Excellency's memo I have already forwarded privately, but as the return and documents referred to in it have not accompanied it, I have now the honour to transmit copies of them for the information of your Honourable Board.

I have, &c.,

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

Selections from the records of the Commissioner in Sind.

SELECTION No. XII.

(*a*) Military Commission appointed by Sir Charles Napier to enquire into a complaint against Seth Naomull, Head Kardar of Kurrachee, and findings of the Commission, 1847.

(*b*) Seth Naomull's appeal to Government.

(*c*) Government decision recognizing his services.

Headquarters Kurrachee, 21st August 1847.

Extract from General Orders.

By His Excellency Lieutenant-General Sir Charles Napier, G.C.B., Commanding the Troops in Sind, No 1 with reference to General Orders No. 3 of the 16th instant, the following opinion of the Military Commission, which assembled at Kurrachee on the 21st day of June 1847, for the purpose of investigating into a complaint made to His Excellency the Governor by Hotchand against Naomull, the Kardar of Kurrachee, together with His Excellency's remarks thereon, are published for general information.

Opinion.

The Commission having maturely weighed and considered the evidence which has been brought before it, is of opinion—

(1) That the complainant Hotchand did together with Mungoomull purchase (650) six hundred and fifty kurwars of the grain of the Ghorabaree district of the Khurreef season of the year 1845 and that the receipt for this grain not having been signed by the complainant Hotchand and his partner Mungoomull, must have arisen either from culpable negligence on the part of the persons in the Collector's office whose duty it was to see that this receipt was signed, or else from collusion on the part of the said persons with the complainant Hotchand and Mungoomull.

(2) That the complainant Hotchand has failed to prove that he saved the Government 10,000 rupees by raising the rate at which the grain of the Ghorabaree district was disposed of. At the same time the Commission think it its duty to remark that the grain of this district appears to have been sold in a very irregular manner in the season referred to.

L (IV) 355—50

(3) That the Kardar of Kurrachee Naomull has, in conjunction with his father Hotchand and his agents, been engaged in extensive mercantile business and also in the purchase and sale of Government hoondees (Bills of exchange) by which latter transaction the Government have suffered a positive loss and that he and the Government Moonshees Preetumdas, Amulroy and Ghoolam Hussain have been engaged either directly or indirectly in the purchase of Government grain, which the Commission begs to observe appears to be a system pernicious to the interests of Government, in as much as the influence of these persons (in their position as Government servants) is quite sufficient to deter other merchants from coming forward.

(4) That from the statements of the complainant Hotchand the information in his possession with reference to (50,000) fifty thousand rupees having been defrauded Government by the persons in the Collector's office, as affirmed in his petition to His Excellency the Governor, does not appear to be sufficient to warrant the seizure of the books of the eight merchants, he has named, as this information does not seem to consist in any facts actually known to himself but merely in what he says he has heard from others.

Kurrachee, 24th July 1847.

(Sd.) R. W. HOMUR,
Major and President.

(Sd.) J. HARDINGE,
Captain and Member.

(Sd.) J. H. KIRBY,
Lieutenant and Member.

14th August 1847, approved and confirmed.

(Sd.) C. I. NAPIER,
Lieutenant-General, Governor of Sind.

Remarks.

On reading the above proceedings my first determination was to bring Mr. Naomull to a public trial before a Military Commission, for grossly deceiving Captain Preedy and robbing the public, as on the face of these proceedings he clearly appears to have done, but Mr. Naomull has formerly at various times done good service to the British and it would grieve me to see him tried before a British Tribunal. I therefore order that Mr. Naomull should retire from the service of the British and be incapacitated from serving our Government in future; unless he wishes to be tried by a Military Commission in which case it shall be granted to him. With regard to the Moonshees Preetemdas, Amulroy and Ghoolam Hussain they ought to be brought to trial and punished, but as I have excused the Kardar Naomull from this shame, so I shall let them off, but they are dismissed from the public service and are not again to be employed.

(Sd.) C. I. NAPIER,

16th August 1847. Lieut.-General, Governor.

No. 117 of 1848.

Kurrachee, 8th February 1848.

To

The Secretary to the Government of Sind.

Sir,

I have the honour to forward the accompanying memorandum of the services of Naomull, late Head Kardar of Kurrachee, received from Captain Preedy, Collector, for submission to the Commissioner.

I have, etc.,

T. K. STEWART, Captain,
Officiating Collector and Magistrate, Kurrachee.

Note by Mr. R. K. Pringle.

Under the circumstances of this case and with reference to what has already passed in regard to it, I think Captain Preedy would have acted more judiciously if he had left the parties to make their own appeal to the Governor of Bombay, if so disposed, and reserved his opinion until it was called for, but I have no objection to submit this memorandum to the Honourable the Governor on his arrival with the above remark and this may accordingly be done.

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

Kurrachee, 14th January 1848.

As I am on the point of leaving Kurrachee on medical certificate I leave the following memorandum of the services of Naomull, lately Head Kardar of Kurrachee, with Captain T. K. Stewart, officiating Collector and Magistrate (whom I request will have the goodness) to lay the same before the Commissioner for submission to the Honourable the Governor of Bombay on the arrival of his honour in Sind.

Memorandum.

1. In the year 1837 Lieut. Carless of the Indian Navy was directed to survey the coasts of Sind and Mekran and to report particularly on the harbour of Kurrachee. While anchored off Kurrachee he received much valuable information and derived great assistance in various ways from Naomull, who supplied his ship with fruit, provisions and whatever else was required. He also rendered important service in saving the lives of several officers of the ship who, without obtaining permission of the Sind authorities, had gone on a shooting excursion into the country. The Nawab of the Town, Ahmed Khan Boorghara, as soon as he heard of the officers having gone into the country, sallied out in pursuit of them with an armed rabble at his heels, knowing that he would take their lives; and they were only saved by the prompt interference of Naomull who, at considerable personal risk, induced the Nawab to draw off with his followers and to allow the officers to return to their ship.

2. In the same year Naomull, having heard that 200 sheep sent by the Political Agent, Lieutenant Luck, had been captured by the Brohees, dispatched his agents to the Brohee chiefs and having recovered the the sheep forwarded them to their destination, Bombay.

3. In 1838 when Government resolved to support the cause of Shah Shujah and it was determined that the Bombay columns of the Army of the Indus should march through Sind, Colonel Pottinger (now Sir Henry Pottinger) directed Naomull to lay in supplies of grain, forage, &c., to provide baggage,

cattle, for the army and to have the whole in readiness for despatch to the mouth of the river where the army should disembark. The force armed under the command of Sir J. Keane, at Vikkur, in November and December 1838 and Major Outram, arrived about the same time at Kurrachee with orders to Naomull to despatch the cattle supplies to Vikkur. Major Outram was hospitably received by Naomull's family and was escorted by his brother Sookram to Gharrah where he met Naomull, who had taken up his abode at that village in order that he might with greater facility collect cattle and supplies without being interfered with by the Ameer's officers. After ascertaining that the carriage and provisions were ready, Major Outram under Sookram's escort pushed on to Vikkur and joined Sir J. Keane and Naomull shortly after followed him with 1500 camels and vast quantity of grain and the supplies. Naomull continued with the army, giving much useful information, until they had passed Hyderabad, when, as Colonel Pottinger required his services, he remained with him at that place and sent on his brother Sookram and several 'Goomastas' (or agents) to afford such assistance as the army might stand in need of as far as Shikarpoor. The services rendered by his brother and agents are well known and were fully appreciated by the Commander in Chief of the Army and by Colonel Pottinger who acknowledged that, but for the assistance rendered by Naomull and his family, the Bombay column would hardly have effected a junction with that of Punjab in 1839: and when it is considered how greatly our services in that expedition depended on the celerity of our movements, it must I think be allowed that Naomull has done the State good services.

4. In the beginning of 1839 the reserve force under the command of Brigadier Valiant arrived at Kurrachee, and as Naomull was at Hyderabad his brothers by his orders rendered assistance. They supplied boats for landing the troops, arranged for their baggage from the Bunder and supplies of provision into them, after they had landed. I was present with this force and can testify that, but for the assistance of Naomull's family, scarcely any of the articles which we stood so greately in need of could have been procured, as all the other natives stood

aloof., evidently regarding us with fear or with no friendly feelings.

5. In the month of April of the same year Captain Hand of the 2nd Regiment was murdered in open day and within three miles of our camp by a body of armed marauders. No correct information could be obtained as to who the murderers were until Naomull after much trouble discovered who they were and where they resided while being made known to the Resident, he demanded them of the Ameers and they were brought to justice.

6. Towards the end of April 1839 Naomull accompanied Colonel Pottinger to Kurrachee and, on the latter's proceeding to Bombay, he remained at Kurrachee rendering all kinds of services for a period of about six months to the camp authorities. Without his aid neither workmen nor materials could have been procured for the construction of pendals for the European soldiers, nor could the Bazaars and commissariat have been supplied with provisions. The Ameers had positively forbidden any of their subjects to settle in our Camp Bazaars, but Naomull in defiance of this prohibition set the towns people a good example by establishing several shops of his own in the Saddar Bazaar.

7. Naomull rejoined Colonel Pottinger at Bhooj in November 1839 and remained with him until the Colonel resigned his appointment in February 1840, when he accompanied his successor Major Outram to Hyderabad and continued with him, rendering him important political services until the Major was transferred to Upper Sind, when Naomull was directed to return to Kurrachee.

8. During the anxious period which succeeded the Cabool massacre Naomull was of the greatest possible service to the authorities at Kurrachee, both in procuring provisions and carriage. Without his aid scarcely a camel could have been procured either for hire or for purchase and the reinforcements, which were so rapidly found into Sind and whose services were so urgently required above the passes, could not have been forwarded. The Ameers were, it is true, ostensibly

friendly, but as all their people hung back from assisting us, it was clear that they, the people, knew full well the secret wishes of their rulers. At the period alluded to, it is my firm conviction that, with the exception of Naomull and his family, we had not a friend between Kurrachee and Cabool amongst the natives.

9. Towards the end of 1842 the fidelity of Naomull towards British Government so provoked the Ameers that they despatched a party of horse from Hyderabad to arrest him, and these horsemen were only prevented carrying their orders into execution by the interference of the Assistant Political Agent, Lieutenant Payne. The ostensible course for this violence was the infringement of the Ameers' orders forbidding the establishment of shops in our Bazaars.

10. In February 1843, when hostility commenced in Sind, Naomull, as usual, was indefatigable in our services. He procured most correct information of the designs of the Ameers, and having obtained intelligence of their having ordered the Jokeyas and Kulmuttee Tribes to occupy the town of Kurrachee and to possess our Camp, he communicated the same to the authorities and thereby enabled us to anticipate the enemies' movements. He also supplied 'cassids' who conveyed letters to and from Sir Charles Napier's Camp when all other communication was cut off. He obtained correct information as to the numbers and position occupied by the combined tribes in the vicinity of Kurrachee, and by supplying us with a few camels and guides enabled us to move out and to disperse them. After which, with the assistance of Oomed Ally, chief of Choota Tribe, he succeeded in recovering nearly the whole of the cattle which had been stolen or driven off from our Camp and restored them to their rightful owners. After the battle of Hyderabad, Naomull did good service in allaying the fears and apprehensions of Baloch Chiefs and Jagheerdars and induced many to come in and to make their Salam to the General who would otherwise have joined Sher Mohomed in plundering the Government grain, etc.

11. After peace was restored, Naomull supplied much valuable information relative to land tenures, customs and

Revenue system of the Ameers and proved very useful to me in settling the affairs of Kurrachee Collectorate. He also furnished a memorandum of debts due to the Ameers, the greater part of which might then have been recovered but which it was at that time understood had been remitted by the Governor-General's proclamation directing that no demands should be made for arrears of revenue. Through information supplied by Naomull, concealed property to the value of half a lac of rupees was recovered by the Prize Agent and brought to account.

12. In May 1843 Naomull was appointed Head Kardar of the Kurrachee Collectorate and continued to occupy that situation until 1847 when, with three of my office Moonshees, he was suspended from Government employ and about six weeks after, the Moonshees and himself were dismissed the services without being ever called on for a defence. They were, it is true, informed that they could, if they chose, appeal to a Military Commission; but as the confirming authority of the sentences of these tribunals had already pronounced them guilty and as they understood (though perhaps incorrectly) that they would be tried before the same court which had already given an opinion in their case, they chose rather to wait and bring forward their claims to justice at more fitting time. Naomull and the Moonshees now solicit the opportunity of being allowed to make their defence before such Tribunal as the Commissioner or His Excellency the Governor may appoint and should they be able to clear themselves, I beg most strongly to recommend that the eminent services of the former should be rewarded with a suitable pension and that the three Moonshees be re-admitted to the service of Government.

(Sd.) H. W. PREEDY,
Captain, Collector and Magistrate.

NO. 326 OF 1848.

Kurrachee, 9th February 1848.

To

THE HONOURABLE J. R. CLERK,
Governor and President.

HON'BLE SIR,

I have the honour to submit for the consideration of your Honourable Board the accompanying copy of a memorandum by Captain Preedy, Collector and Magistrate, Kurrachee, detailing the services of Naomull, late Head Kardar of Kurrachee.

Under the circumstances of the case, and with reference to what has already passed in regard to it, I think Captain Preedy would have acted more judiciously if he had left the parties, alluded to, to make their own appeal to your Honourable Board, if so disposed, and reserved his opinion until it was called for.

I have, &c.,

R. K. PRINGLE,
Commissioner in Sind.

No. 7 of 1848.

22nd February 1848.

To

R. K. PRINGLE, Esquire,
Commissioner in Sind.

Sir,

The Honourable the Governor has received your letter of 9th instant, No. 326 and its accompaniment, and directed me to request that you will favour him with copies of any proceedings and orders which may have issued by His Excellency the late Governor relative to the circumstances alluded to by Captain Preedy in paragraph 12 of his memorandum of 14th January 1848.

I have, &c.,

(Sd.) GOLDSMID,
Secretary in attendance to the Honourable the Governor.

NO. 433 OF 1848.

REVENUE DEPARTMENT,

Kurrachee, 26th February 1848.

To

THE HONOURABLE GEORGE RUSSELL CLERK.

HON'BLE SIR,

I have the honour to acknowledge the receipt of Mr. Secretary Goldsmid's letter No. 7 of the 22nd instant, and to transmit, for the information of your Honourable Board, the original proceedings of a Military Commission assembled at Kurrachee to investigate certain charges brought against Native officers in the Kurrachee Collectorate, the order of His Excellency the late Governor being recorded thereon.

2. I likewise transmit in original a note from the Collector of Kurrachee and the original petition without date from Naomull to the late Governor with His Excellency's pencil memoranda noted thereon.

3. May I request that the original documents herewith transmitted may be returned to me?

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

No. 2591 of 1848.

TERRITORIAL DEPARTMENT.

Bombay Castle, 6th May 1848.

To

R. K. PRINGLE, Esquire,
Commissioner in Sind.

Sir,

I have laid before the Right Honourable the Governor in Council your letters No. 326 and 433, dated respectively, the 9th and 26th February last, forwarding a memorandum by Captain Preedy of the services of Naomull, late Head Kardar of Kurrachee, and the proceedings of a Military Commission assembled to enquire into the conduct of the Kardar.

2. In reply, I have been desired to state that His Honour in council concurs in opinion with you that Captain Preedy would have acted more judiciously had he left the party interested to make his own appeal to Government, reserving his opinion until it was called for, but as Naomull has performed good and acceptable service for the British Government, in difficult and troublesome times, and has been disgraced and dismissed from the service by a Military Tribunal, on an *ex parte* statement, without being put on his trial or heard in his defence, the Right Honourable the Governor in Council has instructed me to request that you will apprise the late Kardar of the specific acts of frauds of which he is accused, hear him in defence, and record any evidence he may adduce in refutation of the same and submit the result, with your opinion, for the final consideration of Government.

3. The proceedings of the Commission are herewith returned.

I have, &c.,

(Sd.) GOLDSMID,
Secretary to Government.

No. 3303 of 1848.

TERRITORIAL DEPARTMENT,

Bombay Castle, 6th June 1848.

To

NAOMULL,

Late Head Kardar of Kurrachee.

In reply to your petition, dated the 17th April last, I have been directed by the Right Honourable the Governor in Council to refer you to the Commissioner in Sind, to whom the instructions of Government on your case were communicated under date the 6th ultimo.

I have the honour to be, &c.,

(Sd.) I. G. LUMSDEN,
Secretary to Government.

No. 3304 of 1848.

TERRITORIAL DEPARTMENT,

Bombay Castle, 6th June 1848.

To

R. K. PRINGLE, Esquire,

Commissioner in Sind.

Sir,

With reference to Mr. Secretary Goldsmid's letter to your address, No. 2591, dated the 6th ultimo, relative to the case of Naomull, late Head Kardar of Kurrachee, I have been directed by the Right Honourable the Governor in Council to transmit, for your information, copies of a petition from that individual, dated the 17th April last with enclosure, and of my reply thereto of this day's date No. 3303.

I have, &c.,

(Sd.) LUMSDEN,
Secretary to Government.

To

THE HONOURABLE GEORGE RUSSELL CLERK,

Governor and President in Council, Bombay.

The humble petition of Naomull, late Head Kardar of Kurrachee.

Most humbly sheweth,

That your petitioner, on the arrival of your Honour at Kurrachee in February last, was permitted to present himself to your Honour, who was so kind as to receive your petitioner and to inform him that your Honour was conversant with your petitioner's circumstances. That your petitioner well knowing that your Honour would give the case of your petitioner a patient consideration, before deciding on its merits or demerits, did not then solicit of your Honour a decision on his case, in the consciousness that a decision would in due time be communicated to your petitioner.

Your petitioner now learns with the deepest regret that your Honour is about quitting the reins of Government and your petitioner therefore ventures to intrude upon your Honour, in the humble but earnest hope that your honour will graciously be pleased to weigh and to decide upon the peculiarly hard circumstances to which your petitioner has been subjected, before your Honour leaves the shores of India; and with this view, your petitioner entreats your Honour will permit him to annex copy of translation of a petition which your petitioner submitted to His Excellency Lieutenant-General Sir Charles Napier, prior to his departure from Sind, praying for a redress of your petitioner's grievances and for a gracious consideration of his case. Your petitioner is aware that your Honour is acquainted with all and every circumstance which induced Sir Charles Napier so summarily to remove your petitioner from office, without giving him an opportunity of vindicating himself, in as public a manner as the machinations of your petitioner's enemies were listened to; had which been granted, your petitioner was confident of an honourable acquittal;—and your Honour must further be aware of the many valuable services

rendered to the British Government by your petitioner, at the frequent risk of the lives of himself and family and your petitioner will not therefore trouble your Honour with a detail of his case but your petitioner humbly but earnestly implores that your Honour will mercifully take all the circumstances of the case of your petitioner into your Honour's gracious and favourable consideration, before your Honour shall surrender the Government of the Presidency, and do your petitioner an act of justice, for which your Honour is famed throughout India, and restore your petitioner to his former rank and respect and entitle him to the consideration of the British Government whom he has so faithfully served in this Province at a time when every other inhabitant of the Province looked with jealousy and hatred on the Government; and your petitioner as in duty bound will ever pray.

(Sd.) NAOMULL.

Kurrachee, 17th April 1848.

Copy of translation of a petition from Naomull, late Head Kardar, to His Excellency the Governor of Sind.

It has pleased the Government on the representation of a man, of notoriously bad character, to deprive me of my situation of Head Kardar of Kurrachee. I cannot complain of this, as Government has the power to entertain and discharge its servants and I bow to the order of Government; but before your Excellency leaves the shores of Sind, in which country I have worked so hard and faithfully for the British Government and through which exertions and assistance, which I and others of my household rendered to the British, I had made the former rulers of the country my most inveterate enemies, I would entreat your Excellency to consider my hard case and to restore me to the respect I once enjoyed at the hands of Government, so that hereafter when your Excellency shall be far away in your native-country, your petitioner may be enabled to trade and live respectably in Sind and remember your condescension for keeping your petitioner's head from going down into the dust.

Your Excellency knows all my past service, how I was the means of enabling the first force that entered Sind under Lord Keane to move up the country, providing them with carriage and all kinds of supplies, how I negotiated with the Ameers on behalf of Government and did my utmost for the British and became hateful to the Ameers who were longing to take my life and with what respect Sir Henry Pottinger honoured me. Why should I repeat all and trouble your Excellency?

Your Excellency has said that I had deceived Captain Preedy. If your Excellency will ask Captain Preedy, he will surely tell your Excellency how faithfully I served before the battle of Meanee and gave him all intelligence and how hard and honestly I have worked since the battle of Meanee as Head Kardar.

It is true that Cheloo purchased hoondies from Government but Cheloo is not my Agent; he is the Agent of my father's firm, which has been established for many years. My grandfather and my relations a century back were merchants. My father and my seven sons of whom two only ever received Government pay—the remaining five have always traded in conjunction with my father. If it be thought that because he was my father's Agent I benefitted him at the expense of Government, it can be seen that he purchased the hoondies at the Bazaar rate. The Court which enquired into the charges preferred by Hotchand did not seem to have been aware that in the sale and purchase of hoondies there are wholesale and retail-dealers as in other traffic. The persons who produced their books in court were all retail dealers and the hoondies they had granted were for small sums, varying from 200 to 400 rupees. Had Government required bills of 300 and 400 rupees only, these were obtainable at from 12 annas to one rupee per cent. but when hoondies for 5,000 and 6,000 rupees were required, the affair became a wholesale transaction. This will appear from the following example. The Collectors sell their grain by wholesale. A bunnyah purchases 100 kurwahs at Rs. 32 the kurwah; he takes this grain into the Bazaar and their retails it at Rs. 36 the kurwah, thereby making a profit of rupees 4 per kurwah. In the same way with hoondees for large sums—few Shroffs are able to purchase them and after purchasing them they often remain for a long

time in their hands before they can dispose of them by retail and in the meantime the interest of the money is lost. The whole sum for which Cheloo purchased hoondees amounted to rupees 27,133 the percentage on which was Rs. 292, half of which was payable to the Sehwan Shroff on whom the hoondees were drawn and the remaining half Rs. 146 could surely not have been much to me and would not have induced me to put my character at stake.

It is customary all over the world to take this hoondeanee or percentage. Money was accumulating at Sehwan, which there was no means of despatching to Kurrachee—the roads were unsafe in consequence of the depredations of Naobut Juttoe, and by the orders of Captain Preedy I produced purchasers of hoondees to the amount required.

I never bought any grain from Government and the grain that Sookram, my deceased brother, is stated to have purchased was the property of Gumasta and Jethmal who had purchased it from Government, 100 kurwars of which Sookram was only the means of selling to Ghoolam Hussain and of which transaction I beg to state to your Excellency I was perfectly ignorant at the time.

If the Military Commission had called me and desired information of me, the members would, I am sure, have taken a different view of the complaint of Hotchand and your Excellency would not have condemned me, but it is my misfortune, not my fault, that I have been removed from my situation and thus degraded without being heard in my defence.

If I had given Hotchand money as he wished me to do, he never would have opened his mouth against me. I refused him because I believed that the English Government would do me justice and would hear what I had to say and because I knew myself to be perfectly innocent.

I am not a young man now your Excellency—grey hairs are coming upon me. It is true I have not served the British Government long (nine years) but in that time I have served them well and faithfully and honestly, as Captain Preedy and all officers who are acquainted with me can testify.

Your Excellency is now going from Sind and I cannot therefore trouble your Excellency for another Court. All that I entreat is that your Excellency will have pity upon me and in consideration of the circumstances which I have now brought to your notice, of the character of the man Hotchand, the circumstances under which he made the false petition to your Excellency, my previous valuable services and the excellent character which I have received from all the officers with whom I had anything to do, give me some mark of your Excellency's favour before your Excellency quits the shores of Sind, probably for ever, which may restore me to that respect which I once enjoyed, but which [by the false representations of a man well known to be the very worst character in Sind and whose falsehoods I had not the opportunity of refuting at the Court] I have now lost in your Excellency's opinion—and your petitioner shall ever pray for and bless your Excellency.

(Sd.) NAOMULL.

The Civil Judge Advocate-General is requested to have the goodness to address a letter to Naomull informing him with reference to his petition to the Government of Bombay that his case has been returned for further investigation; and forwarding to him copy of the charges as framed from the proceedings before the Military Commission by him (the Judge Adovcate-General), with extracts of those portions of the evidence on which they are based, to which Naomull may be called upon to state anything he has to urge in defence, and any evidence he may have to adduce in support of such statement.

The charges and evidence may be forwarded in English as being the language in which the original proceedings were recorded, and because I believe Naomull is unacquainted with Persian, the language of the official business in this Province; but he may be informed that if he would prefer having them in Persian, they will be translated and sent to him in that language.

(Sd.) R. K. PRINGLE,

18th July 1848. Commissioner in Sind.

DRAFT OF CHARGES.

Naomull, late Head Kardar of Kurachee, charged.

1. With unbecoming and improper conduct, in having in the month of December 1845, received individuals in his private house at Kurrachee, and there arranged with them for the sale of certain Government grain.

2. With having at Kurrachee in the month of December 1845, knowingly allowed the name of a boy, named Rochee Ram, to be inserted in a sale bill as the purchaser of certain Government grain. He (Naomull) being aware at the time, that Rochee Ram was not the real purchaser of the grain and that his name was fictitiously entered in the sale bill, with the view of concealing from the Collector that the purchase of the said grain was made by certain moonshees in the employ of Government.

3. With having at Kurrachee during the years 1843-44, when consulted by Captain Preedy, Collector and Magistrate of Kurrachee, regarding the negotiation of the hereafter mentioned bills of exchange on account of Government, fraudulently caused them to be negotiated at a rate, unfavourable to Government, and differing from the Bazaar rate of the day; the negotiation of the Bills had been transacted through a firm of merchants of which he (Naomull) was one of the partners, Government sustaining a loss by this fraudulent transaction of one per cent. or more on the amount of each bill, as follows:—

1843, November 20th—Bill received from Cheloo for 2,000 rupees money paid at Sehwan, discounted at the rate of 1½ per cent.

1843, December 30th—Bill drawn by Peetumbardas, Kardar of Tatta, on Cheloo for 2,000 rupees, discounted at the rate of 1 per cent.

1844, March 7th—Bill drawn on Varand Mull Shewandas Rs. 490-8-0 discounted at the rate of 1½ per cent.

1844, April 18th—Bill written by Government to the Kardar of Sehwan on Reloo Hindu, the Gomasta of Naomull, for 2,500 rupees discounted at 1½ per cent.

1844, April 23rd—Bill written by Government to the Collector of Sehwan for Rs. 3,633-12-0 purchased by Cheloo, discounted at the rate of 1½ per cent.

1844, April 26th—Bill written by Government to the Kardar of Sehwan for 2,500 rupees discounted at the rate of 1½ per cent.

1844, June 18th—Bill written by Government on the Kardar of Sehwan for 5,000 rupees discounted at the rate of 1 per cent.

1844, December 7th—Two bills, one for 5,000 the other for 2,000 rupees drawn by Government on the Collector of Sehwan discounted at the rate of 1½ per cent.

1844, December 18th—Two bills drawn by Government on the Collector of Sehwan for 5,500 rupees discounted at the rate of 1½ per cent.

(Sd.) K. YOUNG, Captain,
Judge Advocate-General in Sind.

Kurrachee, 1st July 1848.

Memo. of evidence, recorded on the proceedings of the Military Commission in Hotchand's case, in proof of the charges to be prepared against Naomull, late Head Kardar of Kurrachee.

In proof of 1st charge.

Naomull's own evidence	...	P. 6 and 7

In proof of 2nd charge.

Ghoolam Hussain	...	P. 17
Preetumdas ...	...	P. 31
Rochee Ram	...	P. 38
Varandmal ...	...	P. 42
Suntdas ...	...	P. 100

In proof of 3rd charge.

Odhoodas ...	...	P. 80, 83 and 88
Chelloo ...	...	P. 91 and 97
Parsram ...	...	P. 48
Kheemun ...	...	P. 99
Captain Preedy	...	P. 118 and 19

(Sd.) K. YOUNG, Captain,

7th July 1848. Judge Advocate-General in Sind.

Kurrachee, 2nd August 1848.

Proceedings of enquiry relating to the case of Naomull, Head Kardar of Kurrachee, taken before Captain Keith Young, Civil Judge Advocate in Sind, under instructions from R. K. Pringle, Esquire, Commissioner in Sind—

Naomull being prevented by sickness from attending, his agent Atoomull is allowed to be present—

Parsram, Bill broker, of Kurrachee being called is questioned—

By the Judge Advocate.

Q. Were you employed in the year 1844 in the purchase or sale of Bills drawn on Sehwan?

A. I was not employed in 1844 in the purchase and sale of Bills. I was not at Kurrachee—then I had gone to Tatta.

Q. When did you leave Kurrachee and were you employed in Bill transactions before you left?

A. I left this in the month of Akhal, 1901 Sumbat (corresponding to August 1844) I was engaged before then in the sale and purchase of Bills in partnership with Mewar and Kheeman.

Q. State the rates at which Bills of exchange on Sehwan were generally purchased and sold through your Agency for the six months preceding your departure from this?

A. In those days the Company's rupees were not generally in circulation and Bill transactions on Sehwan used generally to be carried on in Kashanee and Govindee rupees, and Bills on Sehwan used to be bought and sold at rates varying from 106 to 110 Kashanee rupees for 100 Govindee rupees.

Q. What was the difference in value between the Govindee and Kashanee rupees?

A. The Govindee rupee was the common current coin at Sehwan, the Kashanee at Kurrachee. Their value fluctuated, depending on the supply and demand but Govindee was always the more valuable of the two.

Q. Were you employed during the period in the sale or purchase of any Bill drawn by Government on the Sehwan Treasury?

A. No, I have never at any time had anything to say to the sale or purchase of such Bills.

Q. At the time referred to did the amount or the Bills make any difference in the rates at which they were purchased or sold?

A. The rates were always fluctuating. In the morning there was one rate in the evening another. Sometimes Bills for large and small amounts were purchased at the same rates and sometimes a Bill for a large amount was purchased at a cheaper rate than one for a small amount.

Q. Have you your books for the period referred to?

A. No they are with Mewar who is outside.

By Naomull's Agent Attoomull.

Q. Were you employed in 1844 in the sale of any Bills of the value of ten or fifteen thousand rupees?

A. No, not to this amount, but I was employed in the sale of Bills on Sehwan of the value of fifteen hundred or two thousand rupees which were purchased by two or three people in partnership.

By the Judge Advocate.

Q. Is the account of this transaction in your books? What month did it take place in?

A. I can't recollect what month it was in, I don't know exactly whether it was in 1844, but it will be known from the books which Mewar has for that year.

Parsram withdraws.

Mewar, Bill broker, of Kurrachee, being called is questioned.

By the Judge Advocate.

Q. Were you employed in the sale or purchase of Bills on Sehwan or elsewhere in the year 1844?

A. Yes, I was in partnership with Parsram.

Q. During that period did you negotiate the sale of any Bills of large amount?

A. I was employed in the sale of Bills on Bombay and Muscat to the value of four or five thousand rupees, but the highest single Bill I transacted the sale of on Sehwan was a thousand rupees.

Q. At the time referred to had the amount of the Bill anything to say to the rate at which it was sold?

A. As it made no difference what the amount of the Bill was, large Bills and small Bills were sold at the same rate.

Q. In the purchase and sale of grain, a person buying a hundred maunds would get it cheaper than if he bought only one maund. Does not the same rule hold good in Bill transactions?

A. No, this is not the case with Bills, but if a person was very much in want of a Bill and none in the market he would pay high for it, but the rate for a Bill of two hundred and five thousand rupees would be the same.

Q. Have you your books for the year 1844 ?

A. Yes, here they are. The books are here produced and the following extract made from them :—

" A Bill, on Bombay, dated 7th Phagoon (April 1844) for Company's Rs. 300 payable at 4 days' sight, negotiated at the rate of 113-12-0. Kashanee rupees for 100 Company's rupees.

A Bill on Bombay, dated 12th Phagoon (April 1844) for Company's Rs. 200 payable at 4 days' sight negotiated at the rate of 114 Kashanee rupees for 100 Company's rupees.

A Bill on Bombay, dated 21st Phagoon (April 1844) for Company's rupees 1,000 payable at 4 days' sight negotiated at the rate of 114 Kashanee rupees for 100 Company's rupees.

A Bill on Bombay, dated 17th Jeth (July 1844) for Company's rupees 2,000 payable at 4 days' sight negotiated at the rate of 105-4-0 Kashanee rupees for 100 Company's rupees.

A Bill on Bombay, dated 18th Jeth (July 1844) for Company's rupees 500 payable at 4 days' sight negotiated at the rate of 105-12-0 Kashanee rupees for 100 Company's rupees.

A Bill on Bombay, dated 18th Jeth (July 1844) for Company's rupees 325 payable at 4 days' sight negotiated at the rate of 105-12-0 Kashanee rupees for 100 Company's rupees.

A Bill on Muscat, dated 17th Cheyt (May 1844) for 25 Tommans payable at 25 days' sight negotiated at the rate of 21 rupees per Tomann.

A Bill on Muscat, dated 17th Cheyt (May 1844) for 15 Tommans payable at 25 days' sight, negotiated at the rate of 20-4-0 Company's rupees per Tomman.

A Bill on Sehwan, dated 1st Vesakh (June 1844) for 1,000 Govindee rupees payable at 25 days date at the rate of 106-12-0 Kashanee rupees for 100 Govindee rupees.

A Bill on Sehwan, dated 1st Akhal (August 1844) for Company's rupees 550 payable at 25 days date negotiated at par.

A Bill on Sehwan for 250 Company's rupees of same date and same terms.

A Bill on Sehwan, dated 2nd Akhal (August 1844) for Company's rupees 1,000 payable at 25 days date negotiated at par.

A Bill on Sehwan, dated 30th Akhal (August 1844) for Company's rupees 500 payable at 25 days after date negotiated at the rate eight annas per cent. premium.

Three Bills on Sehwan, dated 29th Kutee (December 1844) for 1,000, 500 and 500 Company's rupees all purchased from Cheloo payable at 25 days after date and negotiated at the rate of 1 per cent. discount."

Examination resumed by the Judge Advocate.

Q. I see that on the 17th Cheyt (May 1844) two Bills on Muscat were negotiated one for 50 Tommans, the other for fifteen at different rates. Can you tell me what was the cause of this difference in the exchange?

A. It is not customary for Bill to sell always at the same price, sometimes they are cheap, sometimes dear.

Q. But these two transactions took place on the same day. Had the relative amounts of the Bills anything to say to the difference of the exchange?

A. The reason is this in the morning there is one rate. In the evening another, and again if anyone particularly wants to buy and there are none anxious to sell, the buyer has to pay a premium, but if there is more anxiety to sell than buy, the seller sells at a discount, but it makes no difference whether the bill is for a large or small amount.

Q. Was Kheemun, the Bill broker, in partnership with you in 1844.

A. Kheemun was in partnership with me for five months only from February to May 1844. He then carried on business by himself.

Mewar withdraws.

Kheemun, the Bill broker of Kurrachee, being called is questioned.

By the Judge Advocate.

Q. Were you employed as a Bill broker at Kurrachee, in the year 1844?

A. Yes at first with Mewar and Parsram, but from July I carried on business by myself.

Q. During the period, did you negotiate the sale of any Bills of large amount?

A. I can tell by referring to my books.

The witness here produces his books and the following extracts are made from them :—

"A Bill on Bombay, dated 6th Akhal (August 1844) for Company's rupees 4,000 payable at 31 days after date and negotiated at the rate of 1-3-0 per cent. premium.

A Bill on Bombay, dated 7th Sawun (September 1844) for Company's rupees 250 payable at 31 days after date and negotiated at par.

A Bill on Bombay, dated 12th Sawun (September 1844) on the same terms.

A Bill on Muscat, dated 2nd Akhal (August 1844) for 31 Tommans payable at 21 days' sight and negotiated at the rate of 19-1-0 Company's rupees per Tomman.

A Bill on Muscat, dated 3rd Sawun (August 1844) for 21 Tommans, payable at 21 days' sight and negotiated at the rate of 19-5-0 Company's rupees per Tomman.

A Bill on Muscat, dated 16th Sawun (August 1844) for 66 Tommans payable at 21 days' sight negotiated at the rate of 19-10-0 Company's rupees per Tomman.

A Bill on Sehwan, dated 9th Budho (October 1844) for Company's rupees 250 payable at 25 days after date and negotiated at the rate of 2 annas per cent. premium.

A Bill on Sehwan, dated 3rd Asoo (November 1846) for 500 Govindee rupees payable at 25 days after the date at the rate of 124-6-0 Kashanee rupees for 100 Govindee rupees.

A Bill on Sehwan, dated 17th Asoo (November 1844) for 500 Govindee rupees payable at 25 days after date and negotiated at the rate of 96-6-0 Company's rupees for 100 Govindee rupees."

The witness withdraws.

Kheemun, Bill broker, is again called in and at the request of Naomull's agent Atoomull, his books are again examined and the following extracts made:—

" A Bill on Sehwan, dated 20th Magh 1901 Sumbat (March 1845) for Company's rupees 400 payable 25 days after date negotiated at the rate of 1 per cent. discount.

A Bill on Sehwan, dated 4th Magh 1901 Sumbat (March 1845) for Company's rupees 1,000 payable 25 days after date negotiated at the rate of 1-2-0 per cent. discount.

Two Bills on Sehwan, dated 5th Magh 1901 Sumbat (March 1845) for Company's rupees 500 and 250 payable 52 days after date negotiated at the rate of 1-2-0 per cent. discount.

By the Judge Advocate.

Q. In the year 1844, did the amount of the Bill make any difference in the rate at which bills of exchange were procurable in the market?

A. If any one was to purchase a Bill for a large amount he would certainly get it at a cheaper rate than he would a small Bill. But if the buyer or seller were anxious about the transaction the rate would depend on which was most anxious for the transaction.

Q. Did you negotiate any transactions for Bills of small amount on Sehwan during the year 1844?

A. No, none under 100 rupees and these were Govindee rupees?

Q. How do you know that if a person were to purchase a Bill for a large amount he would get it at a cheaper rate than he would for a small Bill?

A. It has happened several times that I have gone to the merchants to ask for a Bill for two or five thousand rupees and they have said they would sell it me at a discount of 1-8-0 and if I wanted a Bill for a hundred rupees I should have it at discount; but the rate depends again on which party is anxious to negotiate the exchange.

Q. Are there any entries in your books for the year 1844 of large Bills and small Bills having been transacted on the same day?

The witness examines his books and the following extracts are made:—

"A Bill drawn on Sehwan, dated 25th Budho (October 1844) for 400 Govindee rupees, payable 25 days after date, negotiated at the rate of 95 Company's rupees for 100 Govindee rupees.

A Bill on Sehwan same date for 250 Govindee rupees, payable 21 days after date at the rate of 95-4-0 Company's rupees for 100 Govindee rupees.

A Bill on Bombay, dated 9th Asoo (November 1844), payable 61 days after date for 800 Company's rupees negotiated at the rate of eight annas per cent discount.

One bill on Bombay same date and payable at same period for Company's rupees 200 negotiated at the rate of 1-12-0 per cent. discount.

It appears that a Bill for 200 rupees on Bombay was purchased at a cheaper rate than the other Bills of larger amount, the sale of which was transacted by you on the same day Can you explain the cause of this ?

A. The Bill for 800 rupees was an undoubted good bill drawn by a wealthy merchant Ramoo. There was no fear of its being returned. The other Bill for 200 rupees was drawn by one Haroon who is not a shroff and the bill was a doubtful one and on that account cheaper.

By Atoomull.

Q. Where were you in December 1844 ?

A. I don't know the English names of the months, but I was at Dwarika in the month of Kuti (December 1844) and returned to Kurrachee about the 1st of Nahree 1901 Sumbat (January 1845).

Q. When examined before the Military Commission you said that the discount on Bills drawn on Sehwan in the month of December 1844 was four annas, how did you know this ?

A. Hotchand questioned me and I told him that I was not here in the month of Kuti (December). In the month of Nahree (January 1845) when I was here, Bills on Sehwan were selling at a discount of 12 annas and a half and afterwards at a discount of one rupee and one rupee four annas. I did not say that the discount was 4 annas in December.

Q. Have you ever transacted the negotiation of a Bill on Sehwan of the value of five thousand rupees ?

No, never.

Kheema withdrawn.

At the request of Atoomull, Mewar is again called in and the following question put to him.

By Atoomull.

Q. In the month of April 1845 did you negotiate a Bill on Sehwan to Keerat, Shroff, and, if so, at what rate?

A. Yes, I find the witness refers to his books (that on 26th Phagun (April 1845) Keerat was the purchaser of a Bill from Cheloo for 3,000 rupees on Sehwan at a discount of 1-6-0 per cent.

Witness withdraws.

Khooshall Rai, merchant of Kurrachee, being called in, is questioned.

By the Judge Advocate.

Have you had much experience in buying and selling Bills of Exchange?

A. Yes, I know all about it but my two nephews generally manage this part of the business.

Q. Does the amount of the Bill make any difference at the rate at which it is transacted.

A. There is no regular rule for Bills of Exchange. Sometimes it happens that a Bill for a small amount can only be bought at a high premium and one for a large amount at a low premium, and sometimes directly the reverse. It altogether depends on the demand.

Q. Do you know of any other cause for variation in the rates of exchange?

A. It depends entirely on the anxiety of the buyer or seller to complete the transaction.

The witness's books are here examined and the following extracts made from them :—

A Bill on Sehwan, dated 2nd Akhar (August 1844), for Company's Rs. 1,500, payable 21 days after date negotiated, at par.

A Bill on Sehwan, dated 15th Buddo (October 1844), for Company's rupees 250, payable 21 days after date negotiated, at two annas per cent. premium.

A Bill on Sehwan, dated 1st Kuti (December 1844), for Govindee rupees 500, payable 21 days after date negotiated, at the rate of 96-4-0 Company's rupees for 100 Govindee rupees.

A Bill on Sehwan, dated 29th Kuti (December 1844), for Company's rupees 1,000 sold by Cheloo, payable 21 days after date negotiated, at the rate of one rupee per cent. discount.

Witness withdraws.

Kheemchand, merchant of Karachi, being called in, is questioned by the Judge Advocate-General.

Q. Have you had much experience in buying and selling bills of exchange ?

A. I have bought and sold them ; I know about them.

Q. Does the amount of the bill make any difference in the rate at which it is transacted ?

A. Sometimes there is a difference of four and six annas between the rates of large and small bills and sometimes they are to be had at the same rates, there is no general rule.

Q. Does the same rule hold good in the purchase of bills as in the purchase of grain or other articles in which there are wholesale and retail rates ?

A. If anyone is anxious to buy, a small bill will be procured by him at a cheaper rate than a large one would, and if any one was anxious to sell, he would sell small bill say at one rupee discount. If he sold for a larger sum he should sell at one and a half rupee.

Q. Do you know of any other cause for the variation in the rates of exchange?

A. There is no other reason but the demand and the supply, and if the Shroffs find they can dispose of a bill to advantage they do so.

The witness books for 1844 are here examined and the following extracts made from them.:—

One bill on Muscat, dated 28th Chet (May 1844), for 50 Tomanns, payable at 21 days sight negotiated at the rate of 20-6-0 Company's rupees per Tomann.

One bill on Muscat same date for 15 Tomanns, payable at 21 days sight, negotiated at the rate of 20 Company's rupees per Tomann.

One Bill on Muscat same date for 85 Tomans payable at 21 days sight, negotiated at the rate of 20-8-0 Company's rupees per Tomann.

One Bill on Sehwan, dated 26th Sawun (September 1844), for Company's rupees 1,000, payable at 21 days after date negotiated, at par.

The witness withdraws.

Question by Judge Advocate.

Q. Atoomull, have you anything to say on the part of Naomull regarding the subject of enquiry?

A. Naomull merely told me about December 1844. I don't know the cause of the rest of enquiry and have nothing to say to it.

Atoomull withdraws and the enquiry is closed.

Remarks.

I beg respectfully to remark that the witnesses Khooshal Rai and Kheemchand are two of the most respectable merchants of the town of Kurrachee, and I think their evidence may

be fully depended upon. I have had their books for 1844 examined, also those of several Bill Brokers of the Town, whose names were mentioned to me as persons having extensive dealings in bills, in the hope of finding entries of transactions of large and small amounts that had been negotiated on the same day. The search has however been unsuccessful, and I have been unable in any of the books examined to find entries of bills on Sehwan of larger and smaller amounts than those extracted.

The difficulty of arriving at a correct understanding regarding these Bill transactions on Sehwan is much increased, in consequence of nearly all bills prior to the month of August 1844, having been transacted in Govindee and Kashanee rupees, the relative value of which appears to have fluctuated considerably.

With reference to the evidence given before the Military Commission regarding the rate at which bills were purchased in the month of December 1844, I beg respectfully to observe it appears to be incorrect, the books of Mewar and Khooshal Rai (extracts contained in pages 8 and 18) both showing that Bills in Sehwan were purchased in December at the rate of 1 per cent discount. These bills apparently formed part of the bills negotiated during that month on account of Government by Naomull.

K. YOUNG, Captain,
Judge Advocate-General in Sind.

Kurrachee, 29th August 1848.

MINUTE.

With reference to Naomull's letters of the 5th and 19th instant to the address of the Judge Advocate-General, that officer is requested—

1st. To forward extracts paras. 2 to 10 and para. 13, commencing from "it will further be remembered" to the end, to Captain Preedy, and to call upon him to state whether the course of procedure therein described is in accordance with the practice of his office and with his instructions.

2nd. To call upon Captain Preedy, with reference to the 19th para. to state at what rates the bills, therein alluded to, were negotiated by Captain Lavie at Sehwan and whether Naomull was in any way connected with or could have influenced their negotiations.

3rdly. To call upon Naomull to explain, with reference to the agreement in para. 21, how the suspicion being that Cheloo had obtained the bills from Government at rates more favourable to him than were current in the market, their purchase from him by other parties at the same rates should be so improbable as to remove that suspicion.

4thly. To examine Parsram and Kheema, and to obtain the opinion of respectable merchants and bill brokers as to the alleged difference of rate between wholesale and retail bill transactions both generally and specially as it existed at the period under enquiry, calling upon them to support their opinions by a reference to books and documents.

R. K. PRINGLE,
Commissioner in Sind.

21st August 1849.

No. 265 of 1848.

Dated the 24th August 1848.

To

THE COLLECTOR AND MAGISTRATE,

Kurrachee.

Sir,

I have the honour by direction of the Commissioner to forward, extracts of a letter to my address under date, the 5th instant, from Naomull, late Head Kardar of Kurrachee; and with reference to paragraph 13, I am instructed to call upon you to state whether the course of procedure therein described is in accordance with the practice of your office, and with your instructions.

2. With reference to paragraph 19 you are requested to state for the information of the Commissioner the rates at which the bills, herein alluded to, were negotiated by Captain Lavie at Sehwan, and whether Naomull was in any way connected with, or could have influenced, these negotiations.

3. I beg you will be good enough to order Parsram and Kheema, the brokers named by Naomull, to attend at my office on Monday next, the 28th instant, at 11 o'clock a.m. and to bring their books with them to enable me to examine them regarding the negotiation of bills of exchange.

I have, &c.,

K. YOUNG,

Judge Advocate-General.

No. 959 of 1848.

Dated the 26th August 1848.

To

THE JUDGE ADVOCATE-GENERAL IN SIND.

Sir,

In acknowledging the receipt of your letter No. 265 of the 24th instant, transmitting copy of a letter to your address from Naomull and requesting me to state whether the course of procedure described in para. 13th of that letter is in accordance with the practice of my office and with my instructions, I have the honour, in reply, to state for submission to the Commissioner that such is not now the practice, although it was so formerly. Naomull being unacquainted with Persian, the satas or agreements were always prepared by my first or second office Moonshee who obtained the signatures of the purchasers to them and afterwards brought them for my countersignature. I considered the Moonshee who procured these signatures answerable for the correctness of them. Since the remodelling of my office establishment and the appointment of a Head Moonshee, I have ordered that all agreements shall be signed before him, after which he countersigns them as a voucher for their correctness and brings them with the parties before me, for my signature and confirmation.

2. In reply to the queries contained in the 2nd para. of your letter I beg to state for the Commissioner's information that the bills negotiated by Captain Lavie at Sehwan during the month of December 1844, January, February, March and April 1845 were all negotiated at $1\frac{1}{4}$ per cent The Shroff who negotiated these bills at Sehwan is named as Laloo and he was, as I understand from Naomull's nephew, a partner in the profits arising from some of the bills remitted from Kurrachee, the profits arising from the bills negotiated at Sehwan were all, I believe, enjoyed by himself. The house of Hotchand & Co., being one of the principal firms in Sind, might doubtless influence the money market at Sehwan, but as there are many

Shroffs located there who are unconnected with this firm, and as Captain Lavie used his best endeavours to get his Bills at as cheap a rate as possible, I am of opinion that he would soon have discovered it, had any undue influence been used in the Sehwan Bazaar by Naomull or his Agent.

3. In compliance with the request contained in the 3rd para. of your letter, I have the honour to inform you that I have directed Parsram and Kheemun, Brokers, to attend at your office with their books, on Monday next, the 28th instant, at 11 o'clock.

I have, &c.,

PREEDY, Captain,
Collector and Magistrate, Kurrachee.

Kurrachee Collector and Magistrate's Office,

Kurrachee, 26th August 1848.

NO. 278 OF 1848.

Dated the 4th September 1848.

To

THE COLLECTOR AND MAGISTRATE

SIR,

With reference to the extracts of a letter from Naomull, late Head Kardar of Kurrachee, forwarded to you with my letter No. 265 of the 24th ultimo, I have the honour to request that you will state for the information of the Commissioner, whether the course of practice described in paragraphs 2 to 10 of Naomull's letter is in accordance with the practice of your office, and with your instructions.

I have, &c.,

K. YOUNG,
Judge Advocate-General in Sind.

No. 999 of 1848.

Kurrachee Collector and Magistrate's Office,

Dated the 5th September 1848.

To

THE JUDGE ADVOCATE-GENERAL IN SIND.

Sir,

I have the honour to acknowledge the receipt of your letter No. 278 of the 4th instant, enquiring whether the practice described in paras. 2 to 10 of the extracts of a letter from Naomull forwarded to me with your letter No. 265 of the 4th ultimo are in accordance with the practice of my office and with my instructions.

2. In reply I beg to state for submission to the Commissioner that I simply directed Naomull to inform the grain merchants in the town that grain was for sale; as to the mode in which this information was to be communicated I gave him no instructions.

3. Naomull, as Head Kardar of the Collectorate, was, I consider, bound to receive persons on business, at any hour, or in any place and I certainly attach no blame to him for receiving persons who wished to make offers for Government grain at the house set apart for the transaction of business, by the firm of which his father is the head. Every Kardar in the Collectorate to this day receives offers for the purchase of Government grain in his dwelling house and afterwards forwards the persons who make the offer to the Deputy Collector or to myself. After receiving such offers we make enquiries as to whether higher rates are obtainable and if not, after obtaining security, close the bargain. All this was done in the case referred to, with the exception of taking security which until lately has not been customary.

I have, &c.,

PREEDY Captain,

Collector and Magistrate, Kurrachee.

NO. 2449 OF 1848.

To

THE RIGHT HON'BLE VISCOUNT FALKLAND,

Governor and President in Council, Bombay.

MY LORD,

I have the honour to acknowledge the receipt of Mr. Secretary Goldsmid's letter No. 2591, dated the 6th May last, in the case of Naomull, late Head Kardar of Kurrachee.

2. Before reporting my proceedings consequent upon the instructions contained in Mr. Goldsmid's letter I beg to point out a misapprehension in the circumstances of the case as stated in the 2nd paragraph. Naomull was not disgraced and dismissed the service by a Military tribunal on an *ex parte* statement without being put on his trial or heard in his defence, but a Military Court assembled by His Excellency, the late Governor, to enquire into acts of malversation alleged against the establishment of the Collector of Kurrachee by an inference, having recorded an opinion that there had been irregularity in the sale of Government grain, that a concern direct or indirect of Naomull and others on the Collector's establishment in the purchase of such grain was objectionable, and that a mercantile firm with which Naomull was connected had unduly profited in the disposal of Government Bills of exchange, Sir Charles Napier gave Naomull the option of being tried before a Military Commission on charges founded on the matter adduced before the Court of Enquiry or retiring from the public service with incapacity for re-employment, the former of which alternatives not having been acceded to by Naomull he remained in exclusion from public employ upto the close of Sir Charles Napier's Government.

3. On the receipt of Mr. Goldsmid's letter I directed the Judge Advocate-General to frame charges against Naomull from the proceedings before the Court of Enquiry and to forward them to him for his reply, which having been received and considered I directed such further proceedings to be taken as

were requisite for the completion of the case. Copies of all these documents are herewith transmitted for the information of your Lordship in Council as per annexed list. The original proceedings before the Court of Enquiry are also re-transmitted.

4. After a careful consideration of these papers I am of opinion that there are not sufficient grounds for charging Naomull with dishonesty but that his extensive local influence and connection with the principal mercantile firms in Kurrachee makes him an unsuitable person for the situation of Head Kardar in the Collector's office there, the duties of which when he held it were somewhat similar to those of Daftardar in the Bombay Presidency; I would therefore recommend that he should not be re-instated in that office but that his exclusion should be divested of anything implying a reflection on his character; and in that case it may be for your Lordship in Council to consider whether his former services as brought to notice by Captain Preedy in his memorandum, dated the 14th January last are of a nature to entitle him to any acknowledgment in the form of a pension.

R. K. PRINGLE,
Commissioner in Sind.

No. 6840 of 1848.

TERRITORIAL DEPARTMENT.

To

R. K. PRINGLE, ESQUIRE,

Commissioner in Sind.

SIR,

In acknowledging the receipt of your letter No. 2449, dated 15th September last, submitting copies of the correspondence, together with the original proceedings before the Court of Enquiry in the case of Naomull, late Head Kardar of Kurrachee, I have been directed to inform you that, after an attentive consideration of the proceedings which have now been held, and of Naomull's defence and explanation on the charges preferred against him, His Lordship in Council concurs in the opinion recorded by you, that there are not sufficient grounds for charging Naomull with dishonesty.

2. The Governor in Council however agrees with you that Naomull's extensive local influence and connection with the principal mercantile firms in Kurrachee make him an unsuitable person for the situation of Head Kardar in the Collector's office, and that he should not therefore be re-instated, although his exclusion should be divested of anything implying a reflection on his character.

3. From the information respecting Naomull's services at present before Government, I have been desired to state, that His Lordship in Council does not consider that he is entitled to a pension.

I have, &c.,

COURTNEYS,

Acting Secretary to Government.

1st November 1848.

No. 3061.

Dated 11th November 1848.

To

THE COLLECTOR AND MAGISTRATE,

KURRACHEE.

SIR,

With reference to your predecessor's letter No. 117, dated the 8th February last, I have the honour to transmit for your information copies of letters as per margin, and to request you will have the goodness to communicate to Naomull the decision of Government in his case in such a form as may meet the intention of the Right Honourable the Governor in Council as intimated in the 2nd paragraph of Secretary Courtney's letter.

No. 326, dated the 9th February 1848, from Commissioner in Sind to Governor and President in Council.

No 433, dated the 26th February 1848, from Commissioner in Sind to the Governor and President in Council.

No. 2591, dated the 6th May 1848, from Secretary Goldsmid to Commissioner in Sind.

No. 2449, dated the 15th September 1848 from Commissioner in Sind to Governor and President in Council.

No. 6840, dated the 1st November 1848 from Secretary Courtney to Commissioner in Sind.

I have, &c.,

R. K. PRINGLE,

Commissioner in Sind.

No. 3062 of 1848.

Dated the 11th November 1848.

To

THE JUDGE ADVOCATE-GENERAL,

KURRACHEE.

SIR,

I have the honour to transmit for your information copies of letters noted below :—

(1) Letter No. 2449 of 15th September 1848 from Commissioner in Sind to Government of Bombay.

(2) Letter No. 6840 of 11th November 1848 from Government of Bombay to Commissioner in Sind.

I have, &c.,

R. K. PRINGLE,

Commissioner in Sind.

No. 115 of 1848.

Dated 14th November 1848

To

SETH NAOMULL,

Kurrachee.

SIR,

Under instructions from the Commissioner in Sind, I beg to forward copy of a letter No. 6840 of 1848, dated 1st instant, to his address from Mr. Courtney, acting Secretary to Government of Bombay, conveying the decision of the Governor in Council upon your case, and in reference thereto, intimating that there were not sufficient grounds for charging you with dishonesty and that your exclusion from public employment should be divested of anything implying a reflection on your character.

I am, &c.,

T. R. STEWART, CAPTAIN,
Deputy Collector and Magistrate.

No. 3353 of 1849.

TERRITORIAL DEPARTMENT.

Dated 17th May 1849.

To

R. K. PRINGLE, Esquire,

Commissioner in Sind.

Sir,

With reference to my letter No. 6840, dated the 1st November last, I have been directed by the Right Honourable the Governor in Council to transmit for your information and guidance the annexed extract para. 7 of a letter from the Honourable Court of Directors, No. 6, dated the 4th ultimo, relative to the case of Naomull, formerly Head Kardar of Kurrachee.

I have, &c.,

COURTNEY,

Acting Secretary to Government.

No. 1151 of 1849.

Revenue Department,

Dated the 26th May 1849.

Copy transmitted to the Collector of Kurrachee.

R. K. PRINGLE,

Commissioner in Sind.

Extract of a letter from the Honourable the Court of Director's No. 6, dated 4th April 1849.

Para 7. After a careful consideration of these proceedings we are of opinion that there are no grounds for charging Naomull with dishonesty in the exercise of his office, but considering the extensive local influence possessed by his family in that place, we agree with you in thinking him an unsuitable person for the situation of Head Kardar in the Collector's office. We see no objection, however, to his being employed elsewhere in the service of Government.

COURTNEY,
Acting Secretary to Government.

NO. 4731 OF 1849.

TERRITORIAL DEPARTMENT.

Bombay Castle, 28th July 1849.

To

R. K. PRINGLE, ESQUIRE,
Commissioner in Sind.

SIR,

I have been directed by the Right Honourable the Governor in Council to transmit the accompanying copies of a petition from Naomull, Seth, formerly Head Kardar of Kurrachee, dated the 10th ultimo, and of its enclosures, and to request that you will be good enough to favour Government with your opinion both as to his claim to some mark of favour in recognition of his former services and the nature of the remuneration, if any, which you would suggest.

2. I have, at the same time, been desired to notice, that Naomull appears to have been furnished with a copy of the Government reply in his case; as no authority was given for this in the letter and such a course has been expressly prohibited in the last para. of the Government Circular of 31st October 1835, No. 2590, without the special permission of Government, His Lordship in Council has instructed me to furnish you with the accompanying copy of this circular for general application in Sind.

I have, &c.,

W. MALLET,
Chief Secretary to Government.

CIRCULAR.

No. 2590 OF 1835.

TERRITORIAL DEPARTMENT

Bombay Castle, 31st October 1835.

To

THE COLLECTORS OF LAND REVENUE
AND SEA CUSTOMS.

SIR,

From several cases which have recently come before Government, the Right Honourable the Governor in Council is led to believe that the Public officers under this Presidency are in the habit of making known to the Native Princes, Chiefs and others who are under their control or with whom they may have official correspondence, the whole of the communications relating to them made by Government to themselves by sending a literal translation of the letter from Government or embodying its whole contents into that sent to the individual concerned, in consequence of which, not only are the decision and wishes of Government frequently communicated to those who are affected by them, but also the motives and policy on which such decision is grounded and which it was by no means intended in many instances should be revealed to the persons interested, but which were made known to the Government Agent for his own information alone.

2. Besides this practice another also obtains which is equally objectionable, and which is the giving up by public functionaries of copies of letters to there own address or of correspondence which may be on the records of their offices to Princes, Sardars or other individuals who may apply for them. The documents so obtained have not unfrequently been made instrumental in causing much inconvenience and embarassment to the Government.

3. In some cases it must be evident that practices such as those to which your attention is now directed, may be highly prejudicial to the public interests and the Governor in Council, directs, therefore, that they be in future discontinued as being objectionable in themselves and as having a tendency to commit Government in many points where such should be avoided, as well as to give parties ground for raising fresh discussions and even for litigation with Government or its officers.

4. Whenever you may be required to make any communication or intimation to any Prince, Sardar or other individual, you are to observe it is a strict rule in future not to give a full translation of the letter you may receive from Government, not to embody the whole of its contents in your own communication to the person addressed, but you are to write a letter or 'Yad' as the custom may be in your own name, containing such parts only of the Government communication as are evidently intended to be made known to the party interested. Whenever you may entertain doubts as to the exact points which should be communicated, you are invariably to write to Government previous to addressing the individual.

5. The Governor in Council further strictly prohibits you from giving copies of any letters or official correspondence on the records of your office, without having first obtained the special permission of Government.

I have &c.,

N. H. TOWNSEND,
Acting Secretary to Government.

To

VISCOUNT FALKLAND,

Governor in Council, Bombay.

The Humble Memorial of Seth Naomull of Kurrachee.

HUMBLY SHEWETH,

1. That your Memorialist has been honoured by receiving the letter, No. 3353, dated 17th May from W. Courtney, Esquire, Secretary to Government, containing an extract of Despatch from the Honourable the Court of Directors, approving of the decision which your Lordship had given in your Memorialist's favour, which is one of the many proofs of the kindness and care which the British subjects in Sind have received from your Lordship and the Honourable Court.

2. That your Memorialist and all his family were freed through your Lordship's mediation from the disgrace to which he had been so mercilessly and unjustly subjected by the Sind Government, but your Memorialist was grieved to learn from your Lordship's instructions as stated in Mr. Secretary Courtney's letter, dated 1st November 1848, that the services faithfully performed by him were not known to your Lordship, and that your Memorialist was not entitled to any remuneration.

3. That your Memorialist is well aware of your Lordship's sense of justice, and he would regret therefore to give any trouble. He begs permission to lay before your Lordship the following circumstances which are obtainable from the official records of Sir Henry Pottinger, and also of Colonel Outram, when these gentlemen were Political Residents in Sind. During the years 1837 and 1838, your Memorialist served under Sir Henry Pottinger, that Honourable gentleman was pleased to approve highly of his services and to recommend

your Memorialist to the protection and favour of the British Government; and also recommended your Memorialist for the situation of British Native Agent in Sind, and that some salary or remuneration might be granted for the duties he was then performing. The despatch referred to was dated February 1839 to the address of the Governor in Council of Bombay and to that paper your Memorialist respectfully solicits your Lordship's consideration.

4. That subsequent to the last mentioned date (February 1839) your Memorialist acted in the same capacity under Colonel Outram C. B., Resident in Sind. The letters of that gentleman to the supreme Government and to the Bombay Government prove the way in which your Memorialist served the Government and how much his services were valued by that gentleman whose correspondence throughout certifies to this fact.

5. That your Memorialist also served under Colonel Valiant, Colonel Spillar, Colonel Farkarson, Captain Wallace, Captain Pelly and Captain Leckie all of whom were politically employed in Lower Sind until the month of May 1842.

Your Memorialist's services up to that time had been gratuitously and cheerfully given and he was allowed to have hopes to the very last that the applications made by Sir Henry Pottinger and Colonel Outram in his favour would be attended; this was never done and his services to that period were unremunerated.

6. That it is well known to your Lordship how undeservedly your Memorialist's exertions to the before mentioned date and since have been requited by the late Sind Government, and he has reason to think that his services and those of other members of his family performed at the risk of life and property when the Ameers threatened your Memorialist with destruction for acting with the British, are now forgotten and that he is no longer considered worthy of any mark of favour.

7. That your Memorialist is now old and unable for active service and is satisfied with his present position with the

favour of Government. He has witnessed many grants of land and money squandered on undeserving men, who have robbed the Government and its subjects, when men who have performed good and faithful service are disgraced. Your Memorialist feels assured that justice will be accorded to him by your Honour or by the Honourable Court of Directors and solicits that the disgrace of an unjust and ignominous dismissal may be obliterated by any small mark of respect or Inam from the lacs of waste land in Sind, in lieu of any pecuniary remuneration it may please the Honourable Court to bestow upon him and his family.

8. That your Memorialist begs to append copies of published correspondence from Sir Henry Pottinger and Colonel Outram reporting the services of your Memorialist, and copy of a petition addressed to the former with his Excellency's remarks thereon on the back, dated Madras 17th January last, to all of which your Lordship's favourable consideration and gracious approval are solicited.

And your Memorialist as in duty bound will ever pray.

NAOMULL SETH.

Kurrachee, 10th June 1849.

Extract from letter from Lieutenant Colonel Outram to the Secretary to the Government of India, dated Hyderabad 8th December 1840.

I take this opportunity of calling to recollection my letter to your address, dated 4th June last, recommending a small pension and dress of honor to be conferred on Naomull Seth for former services, to which no reply has yet been received Since then I have derived much assistance from that devoted friend of the British Government on the present negotiation with Meer Shere Mohomed, as shown in the accompanying correspondence, in assisting the troops in passing through the country, and also in bringing to light the peculations of Moonshi Jethanand, whereby he has not only brought upon himself the enemity of that individual but also of all the most influential Shahukars of the City who were concerned in Moonshi Jethanand's frauds.

I remain of the same opinion as then expressed of the impolicy of employing that person or any other native of Sind extensively connected in the country in any responsible permanent situation, but I consider that he highly deserves distinction for his many services to the British Government and that it is politic to show that we appreciate and reward such services.

I beg leave therefore most respectfully to repeat my former recommendation of this individual to the favourable consideration of His Lordship the Governor-General in Council. A copy of this letter will be forwarded to the Government of Bombay.

I have, etc.,

J. OUTRAM.

No. 131

Camp Jerruck, 28th January 1839.

From

SIR, HENRY POTTINGER,
Resident in Sind.

To

REAR ADMIRAL SIR FREDRICK MAITLAND,
Naval Commissioner-in-Chief.

SIR,

I have the honour to forward a duplicate of my letter to you of the 21st instant, also a copy of one which I addressed on that day to Colonel Valiant.

The enclosed copy of a demi-official letter which I wrote yesterday to the Governor of Bombay will put you in full possession of the state of affairs up to this moment.

Whether the Ameers are unwilling or unable from the violence of their soldiery to treat with me, it matters little; and should the latter be the fact, it is not to be forgotten that those chiefs have placed themselves in this predicament by calling out their army. And referring to more recent instructions which I have received from the Governor-General of India I should now consider myself at liberty to ratify the treaty I have offered the Ameers, without an additional stipulation and such further penalities shall be inflicted on them as the Government may think fit to direct.

Under these circumstances a force must of course go to Kurrachee and take possession of that place which I trust for the reasons assigned in my first instructions to Colonel Valiant will be effected peaceably; but it is needless to tell you that all opposition must be put down.

There is one point to which I solicit your kind and minute attention. I aliude to the protection under all circumstances of the house, family and property of Naomull Seth of Kurrachee. That individual is now with this force.

He has most zealously, indefatigably assisted us and I cannot convey my deep anxiety regarding him and his, better than by saying that they ought to be guarded as though they were those of the Governor-General of India.

I have, etc.,

H. POTTINGER.

To

His Excellency Sir Henry Pottinger, G.C.B.,
Governor of Madras.

The humble petition of Naomull Seth of Kurrachee (Sind)

Most Humbly Sheweth,

That your petitioner was well known to your Honour whilst in this country and humbly trusts that his character and services performed under your honour's auspices have not escaped your honour's memory. He now takes the liberty of addressing these few lines to your honour.

That your petitioner, from the time of your honour's departure from Sind, continued the devoted servant of the British Government, performing with zeal and energy every duty that was assigned to him.

That at the recommendation of Colonel Outram, late Political Agent at Hyderabad, your petitioner from the month of May 1842 was appointed by the supreme Government to perform the duties of Native-Agent at Kurrachee and through the kindness of that officer your petitioner was honoured by many favours, his services having also been acknowledged by a 'Kelat' from the Governor-General of India.

That your petitioner from the above mentioned date until the country of Sind was conquered by the British, continued in the same capacity, receiving the same salary of Rs. 100 (one hundred) per mensem, after which, through the kindness of the Collector and Magistrate of Kurrachee (Captain Henry Preedy) and the favour of the late Governor of Sind, your petitioner's salary was increased to Rs. 200 (two hundred) by his holding the situation of Head Kardar of Kurrachee.

In the last named capacity your petitioner acted for four years with faithful and unceasing energy, attending daily at the Kacheri of the Collector, in the execution of every duty presenting itself to the exclusion of your petitioner's interest in trade.

That your petitioner's exertions were approved of by the Collector, Captain Preedy, your petitioner has had every proof and assurance and to that gentleman your petitioner most respectfully and confidently refer your honour.

But it was the fate of your petitioner that the machinations of evil designing people of this country, enemies to the late Ameer's Government and alike enemies to the British Government, should prevail against him.

These men, with the encouragement then given to their practices, preferred false and frivolous charges against your petitioner; a court was convened by General Sir Charles Napier, the late Governor of Sind, composed of three Military officers (two of whom were young gentlemen of a Queen's Regiment) who were directed to enquire into these false charges. Their limited knowledge of the language and practices of the Sind people gave your petitioner little hope of justice. False evidence was adduced, and your petitioner, to whom was denied the privilege of a common felon, without hearing what had been recorded against him or of being heard in his own defence, was ordered to retire from, and was pronounced incapable of being again employed in, the services of that Government, which your petitioner had long and faithfully served, or to stand a trial.

With a court composed, as above stated, your petitioner was not desirous of risking his life and character, he preferred submitting for a time until he could receive justice.

In this degraded state your petitioner continued until the late Governor quitted this country, when by the favour and wellknown justice of the Bombay Government, your petitioner's case was ordered to be investigated and after a strict but important enquiry by the Commissioner, Mr. Pringle, and Captain Young, the Civil Judge-Advocate in Sind, your petitioner was acquitted of all guilt, as the accompanying copy of a letter from the Bombay Government will show.

It has been in this manner your humble petitioner has been treated after his long services, performed often at the risk of his life and property when the Ameers Government threatened him with destruction, your petitioner's character was degraded in the published Sind General Orders, and whilst he was thus stigmatized he was ashamed to solicit your honour's interference or help, that justice might be granted. But this justice has at length been extended to your petitioner, yet his name, his trade, his influence in his family and caste have suffered, and his past services are no longer thought of.

Your petitioner with great grief observes that his mercantile connections and local influence render him unsuitable in the eyes of Government for further employment; your petitioner is not in indigent circumstances and does not ask service for the sake of emoluments. The salary he has enjoyed would form but a small portion of what your petitioner has forfeited in trade by his having accepted that honourable service.

But that your honour may know that but for the advantages connected with the above stated obstacles to present employment your petitioner could not have been of the slightest assistance or service to the British Government when it condescended to employ him, and it was well known to your honour, to Colonel Outram, and to General Sir Charles Napier, when they honoured your petitioner with their orders, that he was engaged in trade. Your petitioner begs therefore, that he may still be held worthy of the confidence then reposed in him.

Your petitioner once held a certificate in your honour's handwriting, this valuable document, he had the misfortune to lose during the war, and your petitioner has now no evidence of your honour's favour or approval. But your petitioner solicits that through your honour's well known influence with the Government of India, his character may be restored in the sight of his countrymen, by any mark of respect the Government may be pleased to confer, in proof of the removal of the disgrace to which your petitioner has been so mercilessly and unjustly subjected.

Your petitioner is now advanced in years, and from long sickness is unable to exert himself in trade, and prays that with your honour's assistance some provision may be made for him in his declining years. Your petitioner has with great pride and solicitude watched your honour's high and honourable career since this country was blessed with your honour's administration, and prays that continued prosperity and health may attend your honour and family, and your petitioner as in duty bound will ever pray.

(Sd.) NAOMULL.

Kurrachee, 3rd January 1849.

MEMORANDUM.

In reply to this petition I think it only just to say that I have always retained (and still do so) a high sense of the devotion, ability and integrity with which Seth Naomull of Kurrachee acquitted himself of various important trusts confided to him whilst the affairs of Sind were under my guidance. That opinion induced me to strongly recommend Seth Naomull to the favour of the supreme Government, as well as to the countenance and protection of my successor, Lieutenant Colonel Outram C. B., and I am happy to learn from the accompaniment to this petition that the Seth's character has been so effectually cleared from the stigma which would appear to have been unjustly cast on it. At the same time, I cannot interfere in this case beyond bearing this willing testimony to the merits (as I found them) of a zealous and consistent well wisher of the British Government and its then Allies.

(Sd.) HENRY POTTINGER.

GOVERNMENT HOUSE,
Madras, 17th January 1849.

No. 1605 of 1849.

Revenue Department,

Kurrachee, 14th August 1849.

To

THE COLLECTOR OF KURRACHEE.

Sir,

I have the honour to transmit copy of a letter No 4731, dated the 28th ultimo, from Mr. Chief Secretary Mallet with accompaniments, and with reference to the memorandum dated the 14th January 1848, left by you for submission to the late Governor of Bombay, Sir George Clerk, to request you will favour me with your opinion as to the amount and form of remuneration which would be most suitable and acceptable in recognition of the former services of Seth Naomull and that in doing so you will have the goodness to abstain from any communication with Naomull himself on the subject.

2. With reference to the 2nd paragraph of Mr. Mallet's letter I have to remark that Captain Stewart appears to have misunderstood my letter No. 3061 of the 11th November last as authorising the furnishing Naomull with a copy of the Government reply in his case.

I have, &c.,

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

Kurrachee, 14th August 1849.

No. 985 of 1849.

Dated 18th August 1849.

Sir,

In acknowledging the receipt of your letter No. 1605 of the 14th instant, transmitting copy of a letter No. 4731, dated 28th ultimo, from Mr. Chief Secretary Mallet and requesting me to give an opinion as to the amount and form of remuneration which would be most suitable and acceptable in recognition of the former services of Seth Naomull, I have the honour in reply to state, that not having had any communication with the Seth on the subject of his petition, either prior or subsequent to his submitting it to Government, I am not aware to what particular object his wishes and expectations tend. I observe however in the 7th para of his petition that he prays that some small mark of respect or Enam from the lacs of waste lands in Sind, in lieu of any pecuniary remuneration, may be conferred upon him, and I am of opinion that such perhaps would be the most suitable and acceptable remuneration for his past political services. I would beg therefore to recommend that a Jagheer of 1500 or 2000 beegahs of cultivable land should be granted to him in the Beronath of Tatta, or in any other Purgunnah which may be considered preferable, to which might be added, should Government think fit, some honorary title, such as it is customary to confer on Hindoos of the Seth's rank in India.

2. With reference to the remark contained in the 2nd paragraph of your letter under reply, I beg to state that, having communicated the same to my Deputy Captain Stewart, I have the honour herewith to transmit copy of his explanations, from which you will observe that Captain Stewart was not aware of the existence of the Government order referred to when he forwarded a copy of the letter conveying the decision of Government on his case to Seth Naomull.

I have, &c.,

(Sd.) PREEDY,

Collector of Kurrachee.

Kurrachee, 18th August 1849.

No. 19 of 1849.

Dated 18th August 1849.

To

THE COLLECTOR OF KURRACHEE,

Sir,

I have the honour to return the letter, in original, from the Commissioner in Sind to your address dated the 14th instant, No. 1605 with the accompanying Circular No. 2590, of 1835, forwarded by you for my perusal.

2. With reference to the 2nd paragraph of the Commissioner's letter I regret to learn that I erred in furnishing Seth Naomull with a copy of the Government decision upon the case, but I beg leave, respectfully, to state that the circular prohibiting the copies of any official correspondence being given in such cases as that referred to, has not until now been made applicable to this Province, nor was I aware that such an order existed.

I have, &c.,

(Sd.) T. R. STEWART,
Deputy Collector.

Deputy Collector's office,
Kurrachee, 18th August 1849.

No. 1632.

REVENUE DEPARTMENT,

Dated 21st August 1849.

To

THE RIGHT HONOURABLE VISCOUNT FALKLAND,
Governor and President in Council, Bombay.

MY LORD,

I have the honour to acknowledge the receipt of Mr. Chief Secretary Mallet's letter No 473, dated the 28th ultimo, with accompaniments; and with reference to the former services of Seth Naomull as set forth in Captain Preedy's memorandum of the 14th January 1848, submitted to the late Governor Sir George Clerk with my letter No. 326, dated the 9th February 1848, and the testimonials of Sir Henry Pottinger and Lieutenant Colonel Outram annexed to Naomull's present petition, to intimate my opinion that some mark of favour should be conferred on that individual, and that a Jagheer of 1500 cultivable beegahs for life would be suitable to the occasion and acceptable to him.

2. With reference to the 2nd paragraph of Mr. Mallet's letter I have the honour to transmit copy of my letter No. 3061, dated the 11th November last, communicating the decision of Government in Naomull's case to the then Captain Stewart and of a letter No. 19, dated the 18th instant, from that officer to Captain Preedy, from which your Lordship in Council will perceive that the furnishing Naomull with a copy of the Government letter in his case was unauthorised by me, and was done by Captain Stewart in ignorance of the general prohibition on the subject which has now been circulated for information and guidance of all officers in this Province.

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

Kurrachee, 21st August 1849.

No. 7683 of 1849.

Territorial Department Revenue,
Dated 28th December 1849.

To

R. K. PRINGLE, Esquire,
Commissioner in Sind.

Sir.

I have the honour, by direction of the Right Honourable the Governor in Council, to acknowledge the receipt of your letter No. 1632, dated the 21st August last, with accompaniments, and, in transmitting herewith, copy of one No. 410, dated the 13th ultimo, from the Secretary to the Government of India with the Governor-General, to request that you will report whether it is likely that any suitable employment, in the service of Government, can be found for Naomull, late Head Kardar of Kurrachee.

2. If you are of opinion that no suitable employment can be found for him, the Right Honourable the Governor in Council authorizes you to confer on him one thousand beegahs of land, it being distinctly understood, as enjoined by the Government of India at the close of their Secretay's letter, above referred to, that the grant is absolutely for his own life-time only.

3. The value of land in Sind being entirely dependent on the supply of water, His Lordship in Council has instructed me to request that, if you act on the authority given you in the last paragraph, you will explain the enquiries and arrangements you may make for ensuring to Naomull his due share of water and for guarding against his taking more, and also whether the revenues of Government will immediately suffer by a falling off in the cultivation of land paying assessment to Government, consequent on a portion of the water being used for Naomull's land.

I have, &c.,

(Sd.) GOLDSMID,
Secretary to Government.

No. 410.

Camp Bhugwarra, 13th November 1849.

To

H. E. GOLDSMID, ESQUIRE,
Secretary to Government.

SIR,

I have the honour to acknowledge the receipt of your letter of the 11th ultimo, No. 6139, submitting copies of the correspondence in the case of Naomull, late Head Kardar of Kurrachee, and recommending the grant to him of a life Jagheer of 1000 beegahs of land.

2. In reply, I am directed to acquaint you that the Most Noble the Governor-General considers that it would be better to act on the suggestion of the Honourable Court of Directors and find employment in office for Naomull. Otherwise His Lordship agrees to the grant of land recommended in the last paragraph of your despatch, provided it be distinctly understood that it is absolutely for his own life time only.

I have, &c.,

(Sd.) H. ELLIOT,
Secretary to the Government of India
with the Governor-General.

Camp Bhugwarra, 13th November 1849.

NO. 52 OF 1850.

REVENUE DEPARTMENT,

Kurrachee, 8th January 1850.

To

THE COLLECTOR OF KURRACHEE.

SIR,

With reference to your letter No. 985 of the 18th August last, I have the honour to transmit for your information copies of the correspondence noted in the margin on the subject of the grant of a Jagheer to Seth Naomull of Kurrachee.

No. 1632 of 21st August 1849 from the Commissioner to Government of Bombay.

2. As I am of opinion that no suitable employment in the service of Government can at this time be found for Naomull, you will have the goodness to report the manner in which you would propose giving effect to the sanction conveyed in Mr. Goldsmid's present communication and how under the circumstances the revenues of Government will be affected as noticed in the closing portion of that despatch.

No. 7683 of 28th December 1849 from Secretary to Government of Bombay to Commissioner in Sind (with enclosure.)

I have, &c.,

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

Camp Sukkur, 8th January 1850.

No. 201.

REVENUE DEPARTMENT,

COLLECTOR'S OFFICE,
Kurrachee, 9th February 1850.

To

THE COMMISSIONER IN SIND.

SIR,

In acknowledging the receipt of your letter No. 52 of the 8th ultimo with enclosures on the subject of a grant for life of 1000 beegahs of land in Jagheer, to Seth Naomull, I have the honour to inform you that having communicated to the Seth, the favourable intentions of Government towards him, he has in reply forwarded to me a petition, of which I beg to enclose a copy.

2. It will be observed that Naomull is dis-satisfied with a life Jagheer of the extent which it is proposed by Government to grant to him and that he considers the remuneration insufficient for the services which he has perfomed.

As the proposed grant is intended solely as a reward for past political services, the value of which can best be estimated by the officer under whose eye they were perfomed, it may perhaps under the circumstances be considered desirable to obtain the opinion of Sir H. Pottinger, under whose immediate control Naomull was serving when his more important services were perfomed, as to the amount of remuneration he may consider him worthy of.

4. Jagheers of such an enormous extent were bestowed by the late Ameers on their followers, for comparatively trifling services, that a grant of a thousand beegahs of cultivable land appears but a small reward in the eyes of a Sindhi, although in reality it is worth from Rs. 1,500 to 2,000 rupees per annum.

I have, &c.,

(Sd) H. W. PREEDY, CAPTAIN,
Collector of Kurrachee.

HONOURED SIR,

Your honour has graciously informed me of the condescension of Government in my case and it is with reference to this that I now respectfully take the liberty of troubling you.

When Colonel Outram, Sir Henry Pottinger, Captain Eastwick and Lord Keane came into Sind, I was honoured with their commands and, as you already know, did good service. After they left you became my master and myself your servant.

The favour that Government has ordered to be bestowed on me is all owing to your own kind recommendation and support and your kindness can never be forgotten by me.

But your honour knows that about 70 lacs of beegahs of land are in Jagheer in this country, you know what a beegah or a thousand beegahs or ten thousand beegahs are able to produce. You know the manner and expensiveness of cultivation in this country; the small returns and heavy expenses, that scarcely one beegah out of every hundred in Jagheer in the country is under cultivation in consequence of these and several other drawbacks and thus therefore you know the value of land in Jagheer, and the estimation in which such is held, unless in cases of very large grants, and you know my services, my labours, my faithfulness and my zeal, and your honour can then think whether the grant of a 1,000 beegahs is any remuneration for all that your servant has performed. If I get any reward it will all be through you honour, and if Government are so kind as to grant me a reward, I pray that it may be suitable to my rank and my services, that all my friends may know of it and think highly of me and that other natives may be induced to do similar good service. Supposing I should die to-morrow, then as Government intend honouring me, my honours will die with me, and what consolation or recompense can this be to me or to my family. In India more substantial and lasting rewards are granted than what is ordered for me, and I beg therefore that, according to my character and respect, a suitable name and character and

respect may be bestowed upon me. But this cannot be done without your honour. I took to no one else but you for kind support and favour, as I do not know any body else and I entreat therefore that you will mercifully consider my case and again be the means of bringing my claim and service and the imperfect remuneration proposed, to the proper notice of Government, so that I may be spared the humiliation of being compelled to accept in Jagheer, an extent of land which should be thought nothing of and which even the Ameers, when they held the country, should never have thought of offering to one of the best of servants, as I have been to the British Government. This will make it worthwhile a Government servant like your petitioner, serving well and faithfully, while Government will sustain no loss by extending its favour to a good servant.

I beg therefore your honour will kindly pardon me for intruding this upon you.

I beg to remain,

Sir,

Your most obedient servant,

(Sd.) NAOMULL.

Kurrachee, 26th January 1850.

NO. 282 OF 1850.

REVENUE DEPARTMENT,

Kurrachee, 12th February 1850.

To

THE RIGHT HONOURABLE VISCOUNT FALKLAND,
Governor and President in Council, Bombay.

MY LORD,

I have the honour to acknowledge the receipt of Mr. Goldsmid's letter No. 7683, dated the 28th ultimo, with accompaniment from the Government of India and to state that being of opinion that no suitable employment in the service of Government was likely to be found for Naomull, I requested the Collector of Kurrachee to report on the mode of giving effect to the grant of a Jagheer sanctioned in his favour. From that officer's reply with accompanying petition from Naomull, copy of which is herewith transmitted, it will be perceived that the latter is dissatisfied with the extent of the proposed grant. Under these circumstances I have to solicit the further instruction of your Lordship in Council on the subject.

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

No. 1808 of 1850.

Territorial Department,

Bombay Castle, 8th March 1850.

To

R. K. PRINGLE, Esquire,
Commissioner in Sind.

Sir

I have laid your letter No. 282 of 12th ultimo, with accompaniments, before the Right Honourable the Governor in Council who directs me to state, that no other instructions relative to the grant to Naomull can be given than those contained in the 2nd paragraph of my letter of the 28th December last, No. 7683.

2. You will be pleased to furnish the information called for in the 3rd paragraph of that communication.

I have, etc.,

(Sd.) GOLDSMID,
Secretary to Government.

No. 532.

REVENUE DEPARTMENT,

Kurrachee, 16th March 1850.

To

THE COLLECTOR OF KURRACHEE.

SIR,

With advertence to your letter No. 201 of the 9th ultimo, I have the honour to transmit for your information the accompanying copy of one from Secretary Goldsmid's letter No. 1808 of the 8th instant, and to request that you will report whether under the decision of Government now communicated Naomull is willing to accept the Jagheer originally sanctioned and, if so, you will furnish the information called for in the 2nd paragraph of my letter No. 52 of the 8th January last.

I have, etc.,

(Sd.) R. K. PRINGLE.

No. 779 of 1850.

Revenue Department,

Dated 17th April 1850.

To

THE COMMISSIONER IN SIND.

Sir,

With reference to your letter No. 532 of the 16th instant, and accompaniment from Mr. Secretary Goldsmid requesting me to report whether, under the decision of Government communicated, Naomull is willing to accept the Jagheer of 1,000 beegahs or not, I have the honour to inform you that having called upon the Seth to state distinctly whether he would accept the grant or not, he has submitted a petition in reply, copy of which I enclose for your information, conveying an unwilling assent to the acceptance of the Jagheer.

2. With reference to the 3rd paragraph of Mr. Goldsmid's letter No. 7683 of the 28th December last, copy of which accompanied your letter No. 52 of the 8th January last, I beg to state that I would propose making over 1,000 beegahs of cultivable land in the Purgunnah of Beronath of Tatta or Garka to Seth Naomull, either in the vicinity of the rivers or of some large canal. If in the former position, the Seth would dig his own canals and would supply himself with as much water as he required without any loss to Government. If the Jagheer selected were watered from a canal, the Seth would be required to pay water tax at the usual rate, the amount of which would be sufficient to remunerate Government for the expenses incurred in canal clearance. I do not anticipate that the revenues of Government will at all suffer by a falling off in the cultivation of land paying assessment to Government, consequent on the withdrawal of a portion of the waters for the irrigation of Naomull's land.

I have, etc.,

(Sd.) H. W. PREEDY,
Collector of Kurrachee

To

CAPTAIN H. PREEDY,

Collector and Magistrate, Kurrachee.

HONOURED SIR,

I have been honoured your favour, dated 25th ultimo, informing me of the wishes of the Bombay Government on the subject of the grant which that Honourable Government has been pleased to confer upon its servant, my duty is to conform to the wish of Government and I am grateful for the kindness which it has already done me in restoring to me my name and character in my native country.

The justice of the Honourable Company is known to the people of every country, and its bounty to those who have served under it with satisfaction is not to be equalled by any other Government and your servant is therefore happy of the distinction which it is his good fate to have earned.

When your honour was pleased to inform me that the Honourable Government had been graciously pleased to grant me a Jagheer of 1,000 beegahs of land, I considered what the people are who now hold Jagheers and what their services had been to obtain for them 7,000,000 seventy lacs of beegahs of land in Sind. If the Honourable Government will look to these people it will find most of them without clothes to their bodies, and your servant felt humbled by consideration of these things; your servant cannot refuse one beegah of land if the Government make the offer of such grant, but your servant respectfully begs permission to say that the value of land in Sind is not so great as in India. Your servant has seen every kind of land in Sind and can assure the Honourable Government of its value.

In the Kurrachee Zillah and also in that of Hyderabad, much of the best land requires to be fallowed every second or third year, from scarcity of water it is often left quite unproductive and if it were possible to ensure a supply of water, the

expenses of so doing will be greater than the produce of many years on a limited piece of land would remunerate, all land near the river and favourable for cultivation is already appropriated and in the waste land where it is the wish of Government to grant me a Jagheer of 1,000 beegahs the expense to bring water to it from long distance will be so great and to cut the jungle and bring people from other parts of the country to cultivate it will entail so much expenditure upon your servant, that one thousand beegahs if granted upon the productive land in Sind will not remunerate him for a great number of years. Your honour has great experience in these matters and your servant trusts that your honour will represent his unfortunate case. Your servant is not a young man and his constitution has suffered much from trouble and vexation of mind from the injuries he has laboured under, but your servant does not wish now to re-iterate these as he is sure it was not the wish of a just Government that he or his family should suffer injury. But your servant is very much grieved to learn that the grant in Jagheer is extended only for his own life time, your servant prays that his services may not be forgotten with his death, which will be the case if the tenure of the Jagheer dies with him; your servant begs humbly that it may be made to descend to his family as all other Jagheers and Inams in Sind have done. By this distinction your servant would be honoured and the profit of his expense and trouble in bringing the said Jagheer into a cultivable condition will be enjoyed by his family and not by the Government zamindars. It is not in the power of your humble servant to object to what the Sirkar orders. If the Sirkar grants one beegah of land its servant will obey, but he prays that his name, character and former services may be respected by the Bombay Government in their decision regarding him, whatever the Government directs its servant will do thankfully even should it end to his loss. If the Honourable Government should wish to employ their servant again, he is anxious and willing to work in any capacity they may order him, and as in duty bound your humble servant will ever pray.

(Sd.) NAOMULL.

Kurrachee, 12th April 1850.

NO. 750 OF 1850.

Sukkur, 25th April 1850.

To

THE RIGHT HONOURABLE VISCOUNT FALKLAND.

MY LORD,

With reference to Mr. Secretary Goldsmid's letter No. 1808, dated the 8th ultimo, I have the honour to transmit for the information of your Lordship in Council copy of one from the Collector of Kurrachee, No. 779, dated the 17th instant, with accompaniment on the subject of the Jagheer granted to Naomull, late Head Kardar of that district.

(Sd.) R. K. PRINGLE,
Commissioner in Sind.

L (IV) 355—60

No. 7540 OF 1850.

TERRITORIAL DEPARTMENT,

Bombay Castle, 15th October 1850.

MEMORANDUM.

The Secretary to Government in Revenue Department presents compliments and begs to inform the Commissioner in Sind, that there is no longer any necessity for his letter No. 750, dated the 25th April last, being entered in his list of unanswered references, the case to which it refers having been finally disposed of by Government letter of 8th March 1850, No. 1808.

(Sd.). GO DSMID,
Secretary to Government.

Selections from the Records of the Commissioner in Sind.

SELECTION No. XIII.

Memorandum by Mr. A. Young, Deputy Collector, Mehar, on the Buttai System.

Memo. of Division of grain in Buttai between Government and the Cultivator.

1. The sharing of the produce of the land between Government and the cultivators is called Buttai. This word appears to mean simply sharing and is applicable to the division of any kind of produce between the owner and the labourers engaged in its production. The most important division being that of the grain between Government and the cultivators, this is what is generally understood by the word.

2. For the collection of revenue in Buttai the Collectorate is divided every season into districts of a convenient size and a temporary establishment appointed to each. This consists of :—

(1) The Buttaidar or divider whose duty it is to superintend the watching of grain in the field, their reaping and final division between Government and the cultivator.

(2) The Buttaidar Mohurrer or writer who writes the Khusra or accounts of Buttai.

(3) The Field watchmen (Kurrawahs) who watch the crops on the part of Government.

(4) The Durwari or grain measurer who measures the grain.

3. The office of Buttaidar is one of great trust, and though not highly paid, it is willingly undertaken by respectable men, such as second class Jagheerdars, &c. The Mohurrer is usually a Hindoo of the Kamora or Amil class. The Field watchmen of whom there are generally two to each Kurrah are appointed half by the Buttaidar, and half by the Kardar, from among their own dependents and followers. The Durwaris are always Hindoos of the banyah class.

4. The claims of Government and the cultivator in the Buttai are in the round numbers, four casas per Khurwar called "Khuruch" (or expenses) for the former and three

casas per Khurwar called Lapah (wages or hire) for the latter out of the gross produce and of the remainder one-third for Government and two-thirds for the cultivator.

5. The cultivator has moreover the right of separating and keeping a portion of the finer grain for seed, giving Government an equivalent out of his share of common grain.

6. To adjust these claims accurately it would be necessary first to measure the whole produce of a field, and afterwards the Government share which would entail not only great delay but also great waste of grain.

7. The grain having been watched while standing, by the "Kurrawahs" on the part of Government and by the cultivators on their own account, is reaped by labourers hired by the Zamindar or owner of the land. These labourers are usually the cultivators and their families, together with members of Brohee and Belochee tribes who come from Cutch and Kelat for employment during the cold weather. The reapers cut the grain and carry it on the backs of their bullocks or on their own heads to the Kurrahs or Buttai enclosures.

8. The Kurrah is a cleaned space, surrounded with a thorn fence, under each harvest, prepared by the cultivators under the directions of the Buttaidar; at the door a shed is built in which the field watchmen live; at regular intervals of about 20 yards round the outside, a cultivator sleeps under a temporary kind of sentry box made with Jowaree stalks or other straw and a few sticks and two of them by turn patrol all round during the night. A grass rope is fastened along the fence and every joint of the rope is sealed with a mud impression of a wooden stamp, bearing the name of the district. At night the door is closed with thorn bushes and mud impressions of the seal so made that the bushes cannot be removed without breaking the seals.

9. Every heap of grain in the Kurrahs both before and after threshing is sealed by an impression of the above stamp made of handful of loose earth put at intervals on the heap.

10. As soon as the reaping is finished, the cultivators tread out the grain with their bullocks, and clean it, and the grain is then ready for division which is effected in the following manner according to immemorial custom.

11. Supposing the produce of a field to be 3 Khurwars and 55 casas, and the owner wishes to set aside 30 casas for seed, his grain will be set out in five separate heaps. One of 30 casas for seed, one estimated as equal to the Khuruch and Laph a and called the Tukseem (literally division) say 25 casas.

12. The remainder constituting the bulk of the produce is divided into three equal heaps called 'Khorees,' as nearly as as can be done by the eye, and from practice and by putting the grain in regular covers, division is made with equal accuracy. This is all done by the cultivators.

13. In small villages all the grain is collected in one Kurrah and in large villages there are several Kurrahs, or part of the produce of one village is sometimes on account of convenience of situation put in the Kurrah of another.

14. In either case the produce of each field is kept separate and set out in the manner above indicated, and the Buttaidar then commences operations by choosing whichever he may consider the largest Khoree for Government and measuring it.

15. The parties employed or usually present at the Buttai are besides the Zamindar or land owner and hari or cultivator—

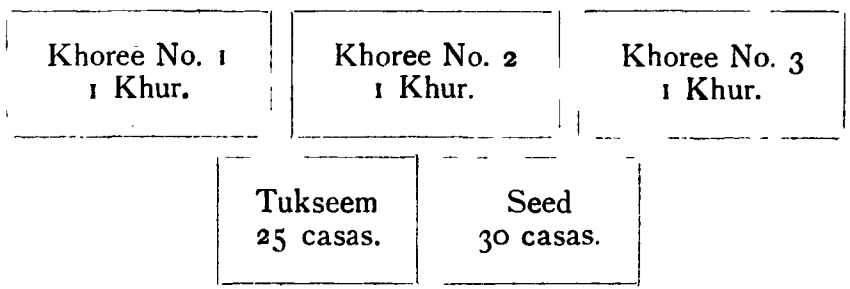
(1) The Buttaidar.
(2) His Writer.
(3) The Grain Measurers.
(4) The Kardar or his Deputy.
(5) The Kardar's writer whose duty it is to write an account independently of the Buttaidar's writer and as a check upon him.
(6) Any Hindoos, who may have made advances to be repaid at harvest time, attend to look after their interests.

16. The measurement is made by the Durwari with a wooden measure called a toya, and holding one toya or 1/240 of a Khurwar, two men work at once and one calls out aloud the number as they go on, upto one hundred, when the amount is written down by the Mohurrers.

17. Formerly the toya was a heaped measure, but for the last two years a strike measure has been used in the Government Buttai. The rule of measurement being that the Kardar who takes charge of the grain may make the Durwari fill the measure to the utmost extent by shaking and pressing down the grain, and that the Buttaidar shall see the strike (in Sindhi Takee) carried fairly along the edges of the measure.

18. The strike toya is so adjusted as to measure about the same as the one formerly in use.

19. In the case above supposed there would be—



Khoree No. 1 having been found to measure 1 Khurwar is entered as the "Hissa Sirkar" (Government share) and three Khurwars are considered the "Hur do Sira" or gross produce (literally both ends because it consists both of Government and cultivator's grain), 12 casas are then taken for Government Khuruch, and 9 for the cultivator's Lapah from the Tukseem.

20. The seed is next measured and as it measures 30 casas, two casas are taken from the Tukseem as Khuruch for Government, but the Zamindar is not allowed Lapah on any but the "Hur do Sira."

21. The 30 casas of seed are made over to the cultivator and 10 casas taken from one of his Khorees which with the 2 casas Khuruch are entered under the head of seed (in Sindhi "Bij").

22. The two casas of Tukseem still remaining are divided according to the same rules, Government taking Khuruch and one-third, the cultivator two-thirds and no Lapah, 3 toyas would accrue to Government and 1 casa, 1 toya to the cultivator out of 2 casas.

23. The result of the above division will give—

	K.	C.	T.
for the Government share ...	1	24	3
,, cultivator	2	30	1

24. After the division the few grains left on the ground during the measurements are collected and the Government share on them, estimated and taken from that of the cultivators, they seldom amount to more than a Choatai and are entered as Koodee (literally waste) in the accounts.

25. If the produce of a field only amounts to one or two casas it is all measured and the Government share entered without any detail.

26. The Buttai Khusras do not show the amount of grain made over to the cultivator; they show the measurement of the three Khorees because that is technically called the gross produce or 'Hur do Sira', and as before remarked the cultivator only receives his 'Lapah' (intended to cover the expense of reaping at the rate of 3 casas per Khurwar on this and not on the real gross produce, and the same obtains with regard to the Toyagee or pay of Kotwal and Buttai establishment).

27. When the whole of the grain in a Buttai enclosure has been divided, the Government share is carried to the Ambar Khana by the cultivators under the superintendence of the Kardar's Goomashtas (Agents), and the cultivators then divide what is left among themselves.

28. The cultivators are the "zamindar" or land owner and the "haree" or grower of the crop.

29. The cultivator's share of the grain is subject to certain deductions out of the gross heap before its ultimate division between the haree and the zamindar.

30. The seed (in Sindhi "Bij") this has to be paid for to the banyah or zamindar who advanced it according to the stipulation made at the time of its purchase.

31. The interest is charged at the time of its advance by putting a price higher than the real market value thus if Jowaree is 4 casas a rupee in the bazaar, the zamindar or the capitalist who advances the seed charges at the rate of 3 casas a rupee, and if grain at harvest time should be 5 casas the rupee, the cultivator will have to pay 5 casas for every three advanced to him.

32. Fifty per cent. is a common interest to put on the seed at the time of its advance, but the rate of payment is generally settled by the principal zamindars and Hindus of the village or district according to the state of the harvest and market, and the full amount is seldom insisted on.

33. Reaping (in Sindhi Labb, or Labarah). The usual pay of a reaper is two patoes of grain a day; an account of the number of people employed is kept (generally in Sind) by any person the cultivator may employ for the purpose, and the amount deducted from the common heap.

34. Field watchmen (Khurwah). It is the custom for the field watchmen besides the pay they get from Government to receive 2 lbs. of flour a day and forage for a pony from the cultivators: the flour is usually advanced by a banyah who is paid at harvest out of the common heap.

35. The hire (in Sindhi "Bharo") of the bullocks or camels for carrying the Government grain to the granary is calculated and paid for out of the common heap.

36. The artificers (in Sindhi "Kusabee") who make ploughs, wheels, &c (Carpenter, Blacksmiths and Potters) are paid, the amount varying as the cultivation is by wheels, or on flooded (sylabee) lands.

37. The driver of the bullocks (in Sindhi Dand Kaho) at the wheel is paid for at the rate of 6 pies a day out of the common heap.

38. The village Moola who has charge of the mosque and calls out the times of prayer, the barber and the water-carrier, always get a small contribution, and in some villages a small quantity is set aside for charity for the spiritual instructor or for various other purposes general to the community.

39. The quantity of grain to be deducted on the above accounts from the common heap may be estimated as follows for the ordinary kinds of grain—

	Seukh, Moke, or Sylabee			Wheel cultivation.		
	K.	C.	T.	K.	C.	T.
Seed	0	1	1	0	1	1
Reaping	0	2	0	0	2	0
Carpenter	0	0	2	0	1	0
Carriage of grain to granary ..	0	0	1	0	0	1
Potter	.....			0	1	0
Use of wheels	.....			0	1	2
Pay of driver	.....			0	2	0
Moola, hajam and sundries ...	0	2	0	0	2	0
	0	6	0	0	11	0

40. "Moke" is cultivation irrigated by canals whose water is above the level of the field and which therefore flows over the surface without being raised artificially. Sylabee, literally flooded, cultivation is that grown on land which has been inundated by the river and retains sufficient moisture for the

growth of a crop without irrigation. Seukh is land in the neighbourhood of the river which though not flooded becomes sufficiently moist from the water round it to grow a crop without irrigation.

41. The remainder is divided between the owner of the land and the grower of the crop.

42. The amount claimed as rent by the zamindar varies in different localities. In Mehar the rent, with which is included the expenses of canal cutting which are always paid by the zamindar, is one-fourth of what remains after the above deductions on moke or sylabee lands and one-tenth on wheel lands.

43. The rest is the share of the grower, provided he found his own bullocks.

44. On moke, sylabee, and seukh lands no bullocks are required except for the single ploughing, and the cultivator hires them if he has none of his own.

45. On wheel cultivation the owner of the bullocks receives a share for each bullock; a bullock shares the same as a cultivator: thus suppose two men and four bullocks have been employed on one wheel the grain will be divided in to six shares, and apportioned accordingly.

46. Supposing two men to cultivate 12 beeghas of Jowaree on one wheel with four bullocks and the produce to be 30 casas per beegha, the distribution would be about as follows:—

Total produce 6 Khurwars.

	K.	C.	T.	P.	C.
Government share ...	2	7	2	0	0
Durmiyanee expenses ...	1	6	0	0	0
Zamindaree	0	16	2	2	1½
4 Bullocks	1	39	3	2	2½
2 Cultivators ...	0	49	3	3	0
	6	0	0	0	0

The Durmiyanee expenses (literally middle expenses being contributed by both haree and zamindar) are detailed in paragraphs 19 to 26.

47. Or supposing the same quantity of grain to be grown on 18 beeghas of moke land its distribution would be—

	K.	C	T.	P.	C.
Government share	2	7	2	0	0
Durmiyanee expenses ...	0	36	0	0	0
Zamindar (or rent)	0	49	0	2	0
Cultivator's share	2	27	1	2	0
Khurwars ...	6	0	0	0	0

48. All these shares are taken away by the parties to whom they severally belong as soon as the Government grain has been removed, and within a week of that time the largest Kurrah will have been closed.

49. The whole process of Buttai occupies about 12 to 16 weeks from the time the grain is reaped till the final clearing of the enclosure.

50. The foregoing account may be taken as an example of the division of the grain in a Buttai village, but different customs exist in different districts.

51. In some districts by old customs 2 heads of Jowaree a day are claimed by the reapers, out of the general produces.

52. In some, in place of Lapah on rice and muttar, a share generally 1/21 is given each day as reaped. This is called "Lye" (literally wages paid by a share instead of a fixed amount) and was given probabaly on account of the greater labour required, to reap these two kinds of grain. In the time of Meers, however, it was allowed in some districts on all crops.

53. The zamindaree on some moke lands amounts to half, while some zamindars take none, merely requiring the cultivators to pay their share of canal expenses, one quarter is the common share taken in the Mehar district on moke and one tenth on wheel lands.

54. It is seldom indeed that a cultivator takes home the quantity of grain above shown as his share; a few who have bullocks of their own and are out of debt may do so, if careful; they are able to save money, and eventually become small pro-proprietors themselves; they may be considered as tenants of the zamindar hiring the land and paying him rent. But the bulk of cultivators who bring nothing but the labour of their hands are generally so much involved either to the zamindar or to the banyah that their share of grain is insufficient to pay off their debts. The consequence is, their employers take the greater quantity, giving them credit for it in an account which is allowed to run on from year to year.

55. The zamindar encourages the cultivator to remain to a certain amount in his debt, as it gives him a claim to the services of the debtor. The small quantity of grain given to this description of cultivator at the Buttai is soon disposed of, and he again applies to the zamindar, who employs him at canal digging or other work till the sowing time comes round, nominally paying him wages, but in reality giving him about 2 pounds of Jowaree a day and crediting him with the rest in his account current.

56. In lands paying cash rents the zamindar or other person who undertakes to pay the Government dues is simply entitled to the grain Government would have taken in Buttai, but a common arrangement in these cases is that the Durmiyanee expenses shall be first deducted and the zamindar shared equally between the cultivator and the person who pays the rent, the latter foregoing interest on seed and other advances.

57. This arrangement and the mode of fixing a fictitious price on the seed, seem to be merely contrivances on the part of the zamindars to avoid direct usury which is forbidden by their religion.

58. The land cultivated by Hindoos has generally been mortgaged to them, and it is still more to their interest to keep a certain number of cultivators in their debt, as they charge 24 per cent. compound interest on everything advanced, besides what they may make on seed or by Buttai.

59. Some crops, such as cotton, tobacco, sugarcane etc., are never Buttaied by Government, but cash assessment of from Rs. 1-8-0 to 2-8-0 per beegha levied instead, and again rents are converted into cash payments by special agreement. The distinction of Government share is, however, always kept up by the Natives, and whether the cash assessment is paid by the zamindar or by a speculator, the payer first takes what would have been the Govevnment claims in Buttai and the remainder is divided in the proportions detailed above, unless special agreements are entered into.

60. Land is occasionally sold, but only by those who are urgently pressed for money and who are consequently obliged to submit to any terms. Four years purchase reckoned on the net rent may be considered a common price.

61. Land is much more frequently mortgaged than sold, the same disgrace not being considered to attach to a man who mortgages as to one who sells his patrimony, though the prospects of recovering possession are often as great in one case as the other.

62. The mortgagee obtains possession of the land, the interest of the money advanced being provided for by the rent. The owner usually retains the right of redemption for an unlimited period. But till the advance is repaid the mortgagee stands in the place of the zamindar in the division of the produce.

(Sd.) A. YOUNG,
Deputy Captain.

Mehar, 23rd March 1851.

Selections from the Records of the Commissioner in Sind.

SELECTION No. XIV.

Schemes for Kurrachee water-supply :—

(a) by Captain DeLisle, Engineer, 1857.
(b) by Mr. John Brunton, M.I.C.E., 1860.
(c) by Mr. Barns, 1866;
(d) by Khan Bahadur Moorad Khan, 1866-68.

L (IV) 355—62

No. 973 of 1857.

GENERAL DEPARTMENT,

Dated 26th June 1857.

To

CAPTAIN DeLISLE,
ENGINEER.

MEMO.

Besides the plan taken up by the Municipality of Kurrachee, for conveying fresh water to Keamaree, two schemes have at different times been agitated for improving the water-supply of Kurrachee. One was known as the Kurrachee Water Company, and was a joint stock undertaking for obtaining water from a well near the Commissariat Godowns, on the road to the Government Gardens, and distributing it throughout the Camp.

2. The plan appeared to be a very simple and practicable one, but it is at present in a state of suspended animation, principally owing to the removal of the original projector.

3. The other was a plan originally designed by Captain Baker, for bringing in water from the Mulleer River. This was a very simple and practicable scheme, which has slumbered and been revived on various occasions since the conquest of Sind.

4. I shall be very much obliged if Captain DeLisle will examine the records of both objects, and favour me with his opinion through the Superintending Engineer, as to what can be done to get either or both executed.

(Signed) H. B. E. FRERE,
Commissioner in Sind.

COMMISSIONER'S OFFICE,
Kurrachee, 26th June 1857.

No. 2294 OF 1857.

PUBLIC WORKS DEPARTMENT.

Kurrachee, 20th July 1857.

From

THE ACTING SUPERINTENDING ENGINEER IN SIND.

To

THE COMMISSIONER IN SIND.

SIR,

I have the honour to submit a memorandum and plan on the subject of supplying water to the Cantonment of Kurrachee, framed by Captain DeLisle.

2. He appears to me to have exhausted the subject, and to have left me nothing to say, but that I agree with him. The cost however is greater than it has yet been estimated at.

3. Taking Captain Baker's lowest estimate, 1,18,525 rupees, for 32,179 gallons, the price per gallon is Rs. 3-11-0 nearly. Captain Hill's was 1,10,803, which, however, may be fairly doubted, the principal expense being in the pipes, which are estimated at 11 annas instead of Rs. 1-8-0; we will call his estimate 2 lacs, the cost per gallon is 9 annas and 2 pies

4. Captain DeLisle's pipe at 135 cubic feet per minute, gives 3 annas and 4 pies only; his discharge is at 135 cubic feet per minute, equal to 1,215,000 gallons, say 1,200,000; this is not quite 50 per cent. above the quantity which seems now to be required, and allowing for the leakage of a constant supply system, and moreover for the certain increase which will take place in the population, it may almost be doubted whether it may not be requisite to increase the supply before many years have elapsed.

5. From a careful calculation made by the late Major Peat, I find that when the Fusiliers were in Kurrachee, and mustered 22 Officers and 766 Non-Commissioned Officers and Privates, the supply provided for them was 6,278½ gallons per

diem, which is as nearly as possible 8 gallons per man; but I apprehend the women and children, and perhaps followers, were included in this, so that the supply may have been only at about 5 gallons per head, which was brought in carts, etc., and must be considered as a minimum. It must be remembered, however, that when water is freely supplied, it is as freely used, and with the greatest benefit from a sanitary point of view.

6. The lowest estimate of quantity now employed in England is 20 gallons per head; and so far from reducing that estimate, it would seem proper rather to increase it, as it is notorious that in a vast number of instances (indeed as a rule), houses even of the better class are not provided with baths.

7. There are omissions in Captain DeLisle's estimate; for instance, he has not mentioned the cattle who must be provided for.

8. I have enlarged on this as I think it was wished to restrict the quantity of water in Bombay.

9. Supposing Captain DeLisle's estimate to be nearly correct, it is clearly to be seen that even if we sold the water for irrigation of gardens, it would be worth purchase at a price which would remunerate Government.

10. At present I believe the pipe would bring in more water than could be used for human consumption, although, eventually, it will probably be all wanted; as it would be expensive and troublesome to have a system of stopcocks, the water at night might be sold for irrigational purposes, thus avoiding the expense and trouble of cocks or reservoirs to catch the surplus water.

11. There is no question that the Municipality will find it cheaper to purchase the water from Government than to raise it by mechanical means from their own well, and the junction can be easily made.

12. There are many reasons why some considerable time will elapse before the commencement of the work; as, first,

that a detailed plan and estimate must be made, and then that the subject must be referred to the Honourable the Court, and as there may be some difficulty in getting the plans and the detailed estimate ready in time for this year's review statement (indeed I can scarcely hope to do so, although I propose, in case you approve the general project, to employ Lieut. Thomson on the work as a separate project under Captain DeLisle, and my own assistant also, Lieut. Baker, could be temporarily employed on the work), and if we cannot prepare it for the review statement of this year, it cannot go in before the end of 1858.

13. For these reasons, which evidently point to considerable delay even in commencing the work, it would be well to consider Captain DeLisle's suggestion as to the purchase of the Cantonment Water Company's well and stock, which may perhaps be within the power of the Bombay Government.

14. The well may from time to time be useful hereafter should the aqueduct require repair, and the distribution pipes would form portion of those eventually required. Thus a certain amount of progress may be made without wasting any public money.

15. I have understood that the pipes procured by the Company are not fitted for the purpose, but it is a well known fact that water-supply without proper sewage arrangements is mischievous even in England.

I have, etc.,

(Sd.) WALTER SCOTT, Colonel,
Acting Superintending Engineer in Sind.

Kurrachee, 20th July 1857.

P. S.—I may further mention that on a fair calculation, 1,000 gallons of water, delivered by Bullocks or Bheesties in the Staff Lines or new European Barracks, cost Rs. 4 annas 2 and pies 8; according to Captain DeLisle's highest proposed charge, the cost would be 4 annas, or less than 1/16th.

(Sd.) W. SCOTT.

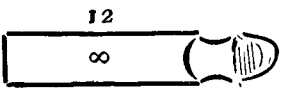
Memorandum by Capt. DeLisle on various projects for supplying Kurrachee with water from the Mulleer River,or from wells near the Lyaree River.

CAPTAIN BAKER'S PROJECT.

Source of supply.—Below the junction of the two tributary torrential streams the Dumb and the Sokhan with the Mulleer, water appears on the surface of the bed and continues for some distance down, until it disappears in the sands. It was from this stream that Captain Baker proposed to derive his supply by constructing a head reservoir in the form of a well, and diverting the stream into it by means of sand dams in the bed, to be renewed whenever necessary after floods.

The sufficiency of the supply is admitted by all those who have entered into the question to be ample even after several successive years of drought, and it will not, therefore, be necessary further to discuss this portion of the project.

Aqueduct.—This was to be formed of the common unglazed water pipe manufactured by the Natives, the shape and dimensions of one of them are shown in the margin, *viz.*, about a foot in length and eight inches in diameter.



The small conical end is inserted in the wide end of the next tube and the joint was to be luted with strong clay. These pipes were the only kind procurable in Sind at that time, but it is evident that the great obstruction presented to the flow of water by these contracted joints is a very serious objection to their use, and in fact this was allowed for, as Captain Baker in estimating for cast iron pipes as substitutes for the earthen tubes, only gave them a diameter of four inches.

These earthen pipes were to be laid on an uniform slope; jointed with clay and surrounded by a casing of stone and mud to protect them from injury. Across some low ground on either side of a hill torrent, a raised aqueduct with four masonry arches in the bed of the stream, was to be built of

stone and mud. This formed an expensive item in the estimate, and an alternative method of using an iron pipe syphon at this part of the line was also estimated for in No. 2 estimate.

A third estimate gave the cost of an iron 4 inch pipe for the whole distance.

Extent of supply.—According to the levels the slope of the pipe would have been about 3 feet per mile from the head reservoir to the Cantonment reservoir, above the Sudder Bazaar, and it was calculated that the quantity of water would be 103·27 cubic inches per second, or 32,197 gallons per diem.

Distribution.—The water was simply to be delivered into a circular reservoir 600 feet in diameter and six feet deep, so as to hold a supply sufficient for several days in case of an accident happening to the aqueduct.

Where there is only a single line of pipe and that of great length to be dependent on, this is a very desirable arrangement.

Cost.—The following are the amounts of the estimates.—

No. 1.	For earthen pipe aqueduct including reservoirs and masonry aqueduct.	Rs. 1,86,760
No. 2.	Substituting iron syphon for masonry aqeduct	Rs. 1,18,525
No. 3.	For a 4 inch pipe throughout.	Rs. 1,21,265

Captain Hill's Project.

This differs from the former only in the details. A short canal with filter and well was to convey the water to the pipe. The situation of the head was nearly the same. But the pipes were to be of glazed stone ware with socket joints, and were to be procured from England with cement for the joints. The main pipe was to be 12 inches in diameter.

Captain Hill's levels however differed a good deal from those of Captain Baker. The former on a distance of 11 miles 1,120 yards, found the total fall to be only 21·47 feet, which corresponds to a fall per mile of only 1 foot 10 inches, in lieu of 3 feet as given by Captain Baker. Captain Hill estimated the discharge of his main at 400,000 gallons per 24 hours, but according to Neville it would not be more than 350,000.

It was proposed to run a dam of sheet piling across the bed of the Mulleer to hold up the water, but the expense of this item led to its being put off until the actual necessity for it was proved.

The stream crossings were to be effected by simply passing the pipe below the level of the beds, protecting them if necessary by concrete.

The distribution was to consist of reservoirs fed by branch pipes from a distributing reservoir at the tail of the main, and extended to the Barracks, Camp, Jail, Town and Keamaree.

The total cost was estimated at Rs. 1,10,803 but the price of the piping was far too low, for instance, the cost per foot of 12″ pipes including carriage and fixing was taken at 11 annas, while the actual price in London is 13 annas at the Manufacturer's yard, and the cost for freight, carriage, breakage and fixing, would probably have raised the pipe to Rs. 1-8-0 per foot.

The project was however warmly recommended, and about to be put in execution, when proposals were made by a newly organized Company to undertake the water-supply, and the subject was again dropped. The new Company, however, after expending their subscribed or paid up capital in sinking a large well near the Government Gardens, of which the Upper works for drawing water are still unfinished, suspended their operations and left the water-supply as it was before.

KURRACHEE CANTONMENT WATER COMPANY.

The works of this Company consist in a large well near the Government Gardens, from which the water is to be raised to a height of 26 feet above the level of the ground. As nearly as I have been able to ascertain, this corresponds to 2 feet below the datum line of the Railway Engineers, *viz.*, the top step of the Trinity Church, the head of water will be 24 feet above the step.

The only plan of distribution furnished by the Company shows a line of pipes to a reservoir at the back of the Sudder Bazaar but they made proposals to supply the Barracks, Jail, and Town with water, and with one or two exceptions, it was possible for them to do so. The level near the new European hospital is about 15 feet above the step of the Church, at the northern end of the old European Barracks about 27 feet above the step, and at the northern end of the new Barracks about 30 feet. It is evident that along the Patcheries of the new Barracks and the European hospital, the supply would only be partial.

But as the scheme is so far advanced, and can be completed within a shorter time than one for bringing water from the Mulleer, it would be an advantage to lay lines of pipes for distribution from the well, in such a manner that they would afterwards be available for the larger project whenever carried out.

This object would be attained by carrying a main along the back of the Sudder Bazaar, and as near the new Barracks as the levels will admit, and taking off branches nearly at right angles for the supply of the Sudder Bazaar, Regimental and Staff Lines, and the Horse Artillery. Government House, and the Railway station could also be supplied in this manner. A branch could also be laid to the aqueduct now under preparation for the Municipality, as an auxiliary, in case the supply from their well should not prove adequate. These advantages however are dependent on the time within which the work could be completed, as otherwise the Mulleer scheme, which could certainly be carried out in a year or eighteen months, is

far superior both as to the quantity of water that could be delivered, and the ultimate economy, as no expense would be incurred for raising water.

It would therefore be necessary for the Water Company to raise fresh subscriptions from the shareholders to complete the works, or to take up a loan, and should they be able to obtain one from Government, a clause might be inserted in the bond, that Government should have the right of purchasing their works at cost price, should it be determined to execute the Mulleer scheme, but it would be a simpler and safe plan to purchase them as they now stand. The well would always be useful, even if the Mulleer works were constructed, to furnish a moderate supply whenever the other was under repair. There is also a large quantity of glazed pipes in the possession of the Company, which if not suitable for the distribution could be used for sewerage, and be handed over to the Executive Engineer for that purpose.

It is then recommended that the Company's works be valued, and an offer made to them for purchasing the whole as they now stand, that they be then completed and used until the larger scheme from the Muller be carried out, after which they would be useful occasionally whenever the Muller aqueduct happened to be under repair.

Sketch of new Project for bringing water from the Mulleer River.

The population of the Camp of Kurrachee is estimated at	15,000	souls.
And of the Town and Suburbs at ...	25,000	,,
Total ...	40,000	souls.

The allowance made by modern Engineers for water-supply is 20 gallons per head for all purposes, culinary, washing and watering roads and gardens.

Thus the quantity required per 24 hours would be gallons	8,00,000
For the Railway, say	30,000
For the Shipping, Keamaree and Ghizree ...	20,000
Gallons ...	8,50,000

which corresponds to 94·4 cubic feet per minute.

The shafts sunk by the Railway Engineers on their alternative or northern line across the Mulleer River, shew the level of the water line to be 92·66 feet above the step of Trinity Church, and 15 to 18 feet below the surface of the soil.

Leaving the temporary Artillery Pendalls which are situated on an eminence out of the question, as they are too high to be supplied at their own level, it would be necessary, making ample allowance for head to overcome the friction of the pipes, to deliver the water from the main into a reservoir 35 feet above datum, which would leave 57·66 feet for the total fall of the pipe, and the distance would be about 16 miles, so that the fall per mile would be very nearly 3 feet, 7½ inches, say 3½ feet.

Under these circusmtances a pipe 18 inches in diameter will deliver—

	Cubic feet per minute.
When full	150
When three-quarter full ...	146
When half full	76

The quantity required being nearly 95 feet, an 18-inch pipe would leave an ample margin for imperfections and the obstructions caused by air shafts, etc.

At this level no stream flows in the bed of the Mulleer, but as before stated, the water line is at a depth of 15 to 18 feet below the suface of the soil. The mode of collecting the supply must therefore differ considerably from the methods proposed in the two former schemes.

At Ahmednuggur one of the principal aqueducts for the supply of the Town derives its supply from a gallery cut under ground along the bank of the Seena River, and filled by filtration from the stream. It is now proposed to adopt this method of collection for the Mulleer, substituting large earthen drain pipes laid with open joints for the substerranean gallery at the Seena. The water should be delivered in a large well to allow sand to settle down and the main pipe should enter the well about a foot or 18 inches below the surface of the water. Thence it would have to be carried with close joints under the bed of the Dund and continue with as uniform a slope as possible to the tail or distributing reservoir above the new European Patcheries.

It is impossible to say how far a large drain like this would affect the supply of water for the cultivation and gardens below it, but there does not seem to be any cause to fear it would do more than lower the water level in their wells by a foot or two, and the water is now so near the surface, that this would be of no great consequence.

Should the supply obtained require to be increased, it would only be necessary to extend the collecting pipe up the River bank, or even lay one across the bed. As the water is found either in a bed of gravel or of firm sand, there would not be much danger of its being disturbed by floods

From the Distributing Reservoir sub-mains would be laid along the upper lines of the Barracks N. E. of Camp and to the distribution pipes from the Kurrachee Cantonment Company Well. Another main might be laid to the Municipality aqueduct, and thus relieve them from the necessity of raising their supply of water, besides the advantage of having their pipe always full.

The head of water would admit of water being laid on to kitchens, bathrooms, and garden reservoirs to private houses, for all of which a monthly charge should be made.

Mr. Giquel, who is now making the glazed earthenware pipes for the Municipality, states, that he would probably be able to furnish and joint 18-inch pipes for Rs. 1-6-0 per foot

run. To be on the safe side, however, it would be better to take Rs. 1-8-0 per foot or Rs. 7,920 per mile of aqueduct. These pipes would be glazed with borax and fitted with collars to be jointed with a water tight composition.

He states that he cannot make socket pipes of these dimensions.

At the level fixed on for the Distribution Reservoir, the cutting in passing the ridge along the N. E. of Camp will be very trifling, while in the projects for bringing the supply from Jemedar-ke-landee, the cutting is nearly 30 feet in depth. On the other hand, the depth at which the pipe must be laid near the Mulleer will be 5 to 6 yards, the pipe gradually approaching the surface as it descends the valley.

The cost may be thus roughly estimated:—

16	Miles of pipe 18-inch diameter, at Rs. 7,920 per mile	Rs.	1,26,720
1	Mile of gathering pipe with dry joints, at Rs. 6,000 per mile ...	,,	6,000
2	Miles of excavation, 5 yards deep, at 4 annas per yard on Rs. 2,200 per mile	,,	4,400
14	Miles of excavation or earth embankment, $1\frac{1}{2}$ yards deep or high at 4 annasper yard or Rs. 660 per mile	,,	9,240
32	Air shafts at Rs. 100 each ...	,,	3,200
1	Head Reservoir	,,	1,000
1	Distributing Reservoir ...	,,	2,000
	Total ...	Rs.	1,52,560
	Add for distribution ...	,,	97,480
	Total ...	Rs.	2,50,000

Say two lacs and a half for the entire project, including the distribution pipes from the Cantonment well, and also a branch pipe to Ghizree Bundar, where water is much needed.

The advantages which it is expected to obtain by this modification of the former project are these—

The water will be delivered at a much higher level.

The main aqueduct will have a greater fall per mile and be consequently less liable to deposit.

There will be no necessity for any dam across the Mulleer for holding up a supply.

The whole of the Barracks can have a supply of water laid on with the exception of the Artillery Pendalls.

The deep cutting near camp will be saved.

Of these—the most important are the height at which the water is delivered and the fall per mile of pipe, and to obtain them it is well worth while to incur the expense of the increased length of aqueduct.

A map copied from the survey made by Lieutenant Macdonald and sections of the shafts sunk on the Mulleer, kindly supplied by Mr. Hardy Wells, are annexed.

The cost of an 18-inch iron pipe landed at Kurrachee would probably be Rs. 5 annas 10 per foot, and that of carriage, laying and jointing about Rs. 3 more, or Rs. 8 annas 10 per foot, which is equal to Rs. 45,540 per mile.

Allowing an annual charge of 20 per cent. on the 2½ lacs to cover interest, repairs and establishment, the cost of 1,000 gallons would be Re. 0-1-10½ and as this is a 50 days supply for one person, the cost for one day would be pies 0·45, or not quite half a pie. Even supposing that only half the quantity available could be disposed of, 4 annas per 1,000 gallons is by no means a ruinous charge to the consumer.

The cost of the project can therefore scarcely be called extravagant.

(Sd.) A. DELISLE, Captain,
Bombay Engineers.

Kurrachee, 9th July 1857.

No. 1296 OF 1857.

PUBLIC WORKS DEPARTMENT.
Dated 1st August 1857.

From

THE COMMISSIONER IN SIND.

To

THE SUPERINTENDING ENGINEER, SIND.

SIR,

I have the honour to acknowledge the receipt of your letter noted in the margin, and to beg you will convey to Captain DeLisle my thanks for the very clear, comprehensive, and complete report which you have forwarded.

No. 2294 of the 20th July 1857.

2. The present is an unfavourable moment to ask Government to expend money, but the project is one not only so beneficial in itself, but so economical in the saving it effects in the current expenditure, that I propose to submit it with an urgent application for sanction.

3. Before doing so I shall be glad if Captain DeLisle will put himself in communication with the Managers or representatives of the Cantonment Water Company, and ascertain the amount for which they would be willing to transfer to Government the property of the Company as it stands.

4. I shall also be glad if he will ascertain by rough approximate estimate, the total cost to Government of supplying water to the Troops and Shipping, including all Military, Naval, and other Government servants and Departments in the Camp at Kurrachee, as well as Keamaree, Munora, and Ghizree.

5. I shall also be glad if you will, as far as you are able, carry out the proposal in your 12th paragraph for supplying the detailed plans and estimates which will be required.

I have the honour to be, etc.,

(Sd.) H. B. E. FRERE,
Commissioner in Sind.

COMMISSIONER'S OFFICE,
Kurrachee, 1st August 1857.

No. 2639 of 1857.

PUBLIC WORKS DEPARTMENT.

Dated Kurrachee, 14th August 1857.

From

COLONEL W. SCOTT,
Acting Superintending Engineer, Sind.

To

H. B. E. FRERE, ESQUIRE,
COMMISSIONER IN SIND.

SIR,

I have the honour to submit the further report called for in your letter No. 1296 of 1st instant. I think that Captain DeLisle underrates the sum now paid by private parties for water.

I have the honour to be, etc.,

(Sd.) W. SCOTT, Colonel,
Acting Superintending Engineer, Sind.

L (IV) 355—64

To

THE SUPERINTENDING ENGINEER, SIND.

SIR,

I have the honour to submit the further information required by the Commissioner, except the price asked for the well and pipes of the Cantonment Water Company, as I have not yet received any reply from them.

The expenditure on account of water during the month of July has been as follows:—

Troops ...	...	Rs.	1,371	8	0		
Departments	...	„	464	1	6		
						1,835	9	6
At Ghizree Bunder ...							
Indus Flotilla and boats.	...				...	1,451	4	0
Sanatorium ...							
At Keamaree	...	„	809	4	0		
Shipping ...	...	„	267	0	0		
						1,076	4	0
At Munora—							
Port Officer's Establishment					...	105	12	0
					For July, Total...	4,468	13	6

While 20 per cent. on the estimated cost of the Mulleer water scheme is rupees 4,167 per month nearly, of which a considerable portion would be repaid by the Municipality and the inhabitants of Camp, assuming that out of the 140 compounds only 100 have Bheesties to supply-water, the cost would be 800 or 900 rupees per mensem, making the total outlay rupees 5,268 or rupees 5,368.

Assuming the ordinary load of a bullock to be 18 gallons and the average number of trips to be six, the cost per 1,000 gallons would be rupees 2-8-0 to 2-12-6.

For water carts in Camp carrying 125 gallons at 4 annas, the cost per 1,000 gallons would be rupees 2.

For the same to Ghizree or Kéamaree at 12 annas per 125 gallons, the cost is rupees 6.

While from the Mulleer the cost would be only 2¼ annas per 1,000 gallons, or 4 annas if sold at double the cost price.

From the above data I calculate the whole amount of water supplied for the sum of rupees 5,268 to be about 15,00,000 gallons, the average cost is thus rupees 3-8-0 nearly per 1,000 gallons, or 28 times that of the Mulleer water, while the quantity for the whole month does not much exceed what the water-works are expected to supply in 1½ day.

I have to request you will have the following corrections made in the original report—

The level of water line at the Mulleer should be.	92·66
Total fall of pipes	57·66
Fall per mile	3-7½″
Taking the fall per mile at 3½ feet only. The discharge of the full pipe will be cubic feet ...	150
When three-quarters full	146
When half full	75

These numbers would give more favourable comparative results than those given above, but I have not altered them as the case so far as economy is concerned is already strong enough.

I have the honour to be, etc.,

(Sd.) A. DELISLE, Captain,
Bombay Engineers.

Kurrachee, 11th August 1857.

True copy.

(Sd.) W. A. BAKER, Lieutenant,
Assistant Superintending Engineer, Sind.

No. 1416 OF 1857.

PUBLIC WORKS DEPARTMENT.

Dated 22nd August 1857.

From

THE COMMISSIONER IN SIND.

To

MAJOR PREEDY; J. GIBBS, ESQUIRE; CAPTAIN DELISLE; J. NEVILLE WARREN, ESQUIRE; P. M. DALZELL, ESQUIRE.

GENTELMEN,

I have the honour to forward papers, as per margin, relative to a plan with which I have been favoured by Captain DeLisle, for supplying the Camp and Town of Kurrachee with water.

1. Comp. file 107 of 1857, Public Works, containing Captain De'.isle's plan for supplying Kurrachee with water from the Mulleer, with map.

2. The plan is now in a shape to admit of being submitted to Government, and before doing so, the only question to be decided is, what proposition should be made to Government as to the mode of raising the money required to carry out the work.

3. From the tenor of the reply given by Government to our application for an advance to enable the Municipality to supply the Town and Bundar with water, I have little doubt but that Government, if it did not execute the whole of the present work itself, would

With regard to supplying Kurrachee with drinking water, I am directed to inform you that His Lordship in Council will be happy to learn that you have been able to mature some plan for raising the funds requisite for effecting this object (which he regards as one of a Municipal nature) either by a water rate or by a temporary increase of Municipal taxation, Government letter No. 2233 of 5th August 1857, General Department.

The Right Hon'ble the Governor in Council observes that the orders of the Hon'ble Court contained in paragraph 44 of their despatch, No. 361 of 1855, permit Government to afford pecuniary aid to Municipal bodies in cases of *great* and *unusual* importance.

2. In consideration of what is stated in paragraph 4 of Mr. Frere's letter of the 29th June, and in his subsequent communication of the 4th instant, the Governor in Council is of opinion that the project of conveying water in pipes to the Bundar at Keamaree, may be regarded as one which sufficiently fulfils the condition described in the preceding paragraph, to justify an application to the Government of India for permission to advance to the Municipality a moderate sum at the current rate of interest.

willingly support an application to the Court of Directors for a loan to enable the Municipality to carry out the project, if we could submit to them such a plan as would ensure the repayment of the loan within a reasonable time.

4. I have therefore resolved to request you to form yourselves into a Committee for the consideration of this subject, and that you will favour me with your opinion as to the mode of taxation best calculated to attain the objection in view.

5. It must necessarily be one in accordance with the existing constitution of the Municipality, to which body I purpose submitting it, before finally applying to Government.

I have the honour to be, etc.,

(Signed) H. B. E. FRERE,
Commissioner in Sind.

COMMISSIONER'S OFFICE,
Kurrachee, 22nd August 1857.

No. 1832 OF 1857.

Dated 2nd October, 1857.

From

THE COLLECTOR OF KURRACHEE.

To

THE COMMISSIONER IN SIND.

SIR,

In compliance with the instructions contained in paragraph 4 of your letter No. 1416 of the 22nd August, a Committee composed as marginally noted, assembled to consider the plan of Captain DeLisle for supplying the Camp and Town of Kurrachee with water, and I have the honour to submit our report for your information.

Mr. Gibbs, Judicial Assistant Commissioner.
Mr. N. Warren, Agent, Sind Railway.
Captain DeLisle, Deputy Superintending Engineer.
Mr. Dalzell, Deputy Collector, Customs.
And Myself.

2. I beg at the same time to return the plan and correspondence on the subject, received with your letter above referred to.

I have the honour to be, etc.,
(Signed) H. W. PREEDY, Major,
Collector and President.

COLLECTOR'S OFFICE,
Kurrachee, 2nd October 1857.

Report by a Committee appointed to consider Captain DeLisle's plan for providing Karachi with a water-supply.

A Report by Captain DeLisle upon the project of bringing water from the Muleer River for the supply of the Town and Camp of Kurrachee with good water, having been remitted to the undersiged by the Commissioner, with a request that they would report upon the feasibility of raising the necessary funds for execution of the project, as revised by Captain DeLisle.

The undersigned report—

That for the complete execution of this work, together with the utilisation of the Cantonment Water Company's Works, and the Municipal works now in progress, for supplying the Town and Bundar with water, it appears that a capital of £ 35,000 is required.

To raise this sum it is suggested that a plan recently introduced into practice in Municipal corporations in England may be adopted, *viz.*, to borrow the capital required on the security of Government or of Municipal rates, or assessment of some kind, and pay a rate of interest, exceeding the rate at which the money could be simply borrowed on the security, by an amount, sufficient to effect the amortisation of the capital and interest in a fixed number of years.

Thus it appears that if the sum of £ 35,000 were borrowed at 8 per cent. interest, with 4 per cent. added for the amortisation, the loan would be entirely abolished, or rather, would expire, in a period of about 15 years.

Upon this plan, a yearly sum of £ 4,200 would have to be paid for 15 years. As the loan would be taken by instalments, the amount payable as interest at the commencement would be lighter.

Referring to estimates of revenue given in Captain DeLisle's supplementary report, it appears that Government would derive much advantage by securing an unlimited supply of water for ... ... £ 4,000 per annum, that 140 compounds would be advantaged by paying only 3 rupees per month on an average for an unlimited supply also, making a total revenue from Camp of ... ... £ 500

It does not appear to be by any means a high estimate, to suppose that a revenue from the Bazaar and from the Town and the Railway Company may amount to ... ... £ 2,500

We have thus a total revenue of ... £ 7,000
Deduct the yearly payment of ... ... £ 4,200

And there remain a sum of ... ... £ 2,800 for management and repairs.

It must be remembered that after 15 years when repairs may be supposed to become a serious item, the yearly payments for interest, etc., will entirely cease, so that the total revenue will be available for management and repairs, or any other purpose.

If the rates leviable by the Municipality or any special assessment can be made available for the purpose, the sum required may possibly be borrowed from one of the banks at Bombay. But if not, it appears very probable that it might be obtained from an English capitalist and on easier terms, if the Government would consent to guarantee a loan or the said rates or assessment.

The Cantonment Water Works may be made available for use during the construction of the larger works; and thus the necessary income may be in part raised, at an earlier period, and the inhabitants of Camp receive an assured supply of good water. This may be effected by an immediate outlay of about £ 10,000 on works, the greater part of which will be available for the larger scheme.

The revenue necessary for the payment of interest and the maintenance of the works should be raised partly by a contract with Government for a full supply of water, partly by a water rent to be levied on every occupied house in Camp, and a rate on the houses in the Bazaar, and partly by a sum to be paid out of the Municipal rates for supply of the Town.

(Signed) H. W. PREEDY, Major,
Collector and President
(„) J. GIBBS.
(„) J. NEVILLE WARREN.
(„) A. DELISLE.
(„) P. M DALZELL.

Kurrachee, 1st October 1857.

No. 255 of 1857.

Public Works Department.
Dated 13th October 1857.

From

The Commissioner in Sind.

To

The Right Honourable Lord
Elphinstone, G.C.B., G.C.H.,
Governor and President in Council, Bombay.

My Lord,

Your Lordship is aware that the Camp, Town and Port of Kurrachee contain no good drinking water, and that the wells of very inferior and somewhat saline water which the inhabitants are compelled to use, are at a distance of from one to five miles from the houses and shipping.

2. Consequently, the quality of water is bad, the supply scanty, and the cost of obtaining it very great.

3. In 1846, soon after the conquest of Sind, Captain (now Colonel) Baker submitted a plan for bringing in water by pipes from the Mulleer River, a distance of 12 or 14 miles. The cost was moderate (under Rs. 1,20,000) the project unexceptionable, and it was pressed forward with characteristic energy by Sir Charles Napier, who was fully alive to its vast importance to Kurrachee; but somehow or other, it was repeatedly delayed and shelved by Boards and Committees, Medical and Military, and though at various times revised and brought forward by Captain Hill and others, it is no nearer execution than when Captain Baker completed his surveys.

L (IV) 355—65

4. It is altogether a curious instance of how a project of great public importance of undoubted economical character and without a single material flaw, may be delayed and indefinitely postponed, even when men of great influence and energy do their best to promote it.

5. I calculate that in 12 years since Captain Baker's time Government alone has spent $5\frac{1}{2}$ times the whole cost of his project in supplying their troops and depots with very inferior water, and Government are at this moment annually paying more than half a lac of rupees per annum for a supply which he proposed to give them nearly free of current expense for an original outlay of less than a lac and a quarter.

6. So obvious were the commercial advantages of supplying water to Camp, that a Joint Stock Company (the Cantonment Water-Company) was formed three or four years ago, to distribute by means of pipes a sufficient supply of the best water procurable in Kurrachee itself. The project was a sound one commercially and in an Engineering point of view, and of much public value, though inferior in some respects to Captain Baker's. But it fell through, as Joint Stock Companies are apt to do in this country, when its origination Captain Ashburner, 8th N. I., left the station.

7. Neither of these plans must be confounded with that of the Kurrachee Municipality, which is simply to raise and distribute Kurrachee water through pipes to the Native Town (not the Camp) and Shipping, and to save the expense of its carriage on women's heads or bullocks backs, in jars and water skins.

8. In the course of discussions regarding the Railway, General Jacob revived a plan of Lieutenant Chapman for a canal from the Indus which would supply drinking water as well as an inland navigation channel. I have detailed in my letter noted in the margin my reasons for considering that irrespective of the expense (£5,02,500) which would alone have been a

No. 183, dated the 3rd July 1857.

difficulty, a navigable canal from the Indus is not the best means which could be devised for supplying drinking water to Kurrachee.

9. On Captain DeLisle's arrival in Sind in May last, I referred the whole subject to him and have now the pleasure to forward copy of a very able and complete report from him with other papers, which I hope may be sufficient to guide Government in carrying out a project so long desired and of such vital importance to the Port and Station of Kurrachee.

10. It will be seen that Captain DeLisle, whose scheme is more comprehensive than that of any of his predecessors, proposes to bring in the water from the Mulleer River in pipes and to distribute it throughout the Camp, the Town and the Port at Ghizree as well as at Keamaree, and to purchase and use, as an auxiliary means of supply, the well whence the "Cantonment Water Company" proposed to draw their water, or to sink a new well near the same spot. This latter part of the project appears to me to be of very great importance, for I do not think it would be at all expedient to make the place entirely dependent on a supply of water from a source which would be more than 12 miles distant, and might therefore of course at any time be cut off or accidently interrupted.

11. As regards the supply of the town, Captain DeLisle's project is auxiliary to that already proposed to Government by the Municipal Commissioner; If carried out, it will give them a cheaper supply and better water, but the means of distribution will be the same as proposed by the Municipal Commission, so that neither project in any way depends on the other, or need interfere with or delay its execution.

12. The capital required to carry out Captain DeLisle's project may be stated at $3\frac{1}{2}$ lacs of rupees, which appears more than sufficient to cover all contigencies, and on which the returns will be very large, if water were supplied at a cost considerably less than that now paid by the consumer.

13. To raise this sum there appear two courses open:—

1st. That the work should be undertaken and executed as a public work by Government, whose servants, soldiers, and departments form at present the largest class of consumers, and that Government should repay itself partly by the reduced cost of such supply to its own people, and partly by charging for the water supplied to private individual.

14. It is hardly necessary for me to state the recommendations for or objections to this mode of proceeding. They are much the same as apply to any other great public work of general and permanent interest and utility being undertaken by Government.

15. The other plan is that the Municipality of Kurrachee, should be empowered to borrow the money required to execute the work and to impose special rates which would provide for the extinction of debt within a given number of years.

16. For this purpose probably the easiest and simplest plan would be to pass a Special Legislative enactment, giving the necessary powers and responsibilities to the Municipality, *pro hac vice.*

17. There are so many considerations affecting a choice between these two propositions, that I will only add that both of them appear to me perfectly unobjectionable, and that I would advocate whichever of them might offer the speediest and most certain means of obtaining the great object in view, *viz.*, the provision of an abundant and cheap supply of good drinking-water to a large and increasing cummunity.

I have, etc.,

H. B. E. FRERE,
Commissioner in Sind.

COMMISSIONER'S OFFICE,

Kurrachee, 13th October 1857.

No. 69 of 1858.

PUBLIC WORKS DEPARTMENT.

Bombay Castle, 8th January 1858.

Letters from the Commissioner in Sind, Nos. 2255 and 319, dated respectively the 13th October and 3rd December 1857, forwarding printed copies of correspondence on the subject of supplying Kurrachee with good drinking-water with the means of pipes from the Mulleer River.

Resolution of Government on the above, dated the 26th December 1857.

Government consider that there can be no doubt as to the advantage of carrying out the project of supplying Kurrachee with water from the Mulleer River as proposed, and would not, under ordinary circumstances, hesitate to apply for permission from the Government of India to advance to the Municipality the funds necessary for giving effect to it.

2. Under present circumstances however, the Right Hon'ble the Governor in Council is of opinion that the alternative proposed in paragraph 15 of the Commissioner's letter should be adopted, and desires that the Commissioner will submit the draft of such an enactment as that contemplated by him, in order that Government may communicate with Mr. Legyeyt for the purpose of getting it passed into law.

3. The draft should provide for the management of the water-works being vested in the Municipality; for repaying with the interest the sum borrowed by a rate to be raised for the purpose, the rate to be limited to a reasonable maximum; for the public supply of water being available in reservoirs conveniently situated for the rate payers; and for the sale of water delivered in houses or for gardening or manufacturing or other purposes for which large supplies are required; the proceeds of sale being brought to account in diminution of the general rate.

HART,
Secretary to Government.

No. 208 of 1858.

General Department.

Kurrachee, 15th May 1858.

My Lord,

With reference to the Government Resolution as per margin, I have the honour to transmit the proposed Draft Act therein alluded to, for submission to the Government of India and the Legislative Council.

No. 69 of 8th January 1858 relative to the supply of water to Kurrachee from the Mulleer River, and the submission of a Draft Act for raising funds for carrying out the profit.

I have, etc.,

H. B. E. FRERE,
Commissioner in Sind.

P. S.— I have made 10 lacs of rupees the limit of the sum which can be borrowed, which allow for the use of iron pipes.

H. B. E. FRERE,
Commissioner of Sind.

PROPOSED DRAFT ACT.

Whereas it is necessary that power should be given to the Municipal Commissioners of the town of Kurrachee to take measures for supplying-water to the Town and Cantonment of Kurrachee and to the suburbs of Ghizree, Clifton and Keamaree, it is enacted as follows :—

1. It shall be lawful for the Municipal Commissioners appointed under Act 26 of 1850, for the Town of Kurrachee, with the sanction of the Governor of Bombay in Council, to borrow on the security of the Municipal Revenues, such sum or sums of money not exceeding ten lacs of rupees as may be required for the attainment of the objects mentioned in the preamble and to engage to pay interest for the same at a rate not to exceed 9 rupees per cent. per annum.

2. To provide for the repayment of the said loan and interest, it shall be lawful for the said Municipal Commissioners by and with the sanction of the Chief Commissioner to impose a tax on all houses, buildings and lands within the limits of the said Town and Camp of Kurrachee and of suburbs of Ghizree, Clifton and Keamaree, not to exceed 2 per cent. per annum of the estimated value of such houses or lands and this rate may from time to time be altered by the Municipal Commissioners by and with the sanction aforesaid.

3. This tax shall be collected in advance in half-yearly payments on the 1st March and 1st September each year, and shall be held to be due from the date of the first money being borrowed under section 1 of this Act.

4. The proceeds of this house and land tax shall not be used except to repay the money borrowed under section 1 of this Act. Until the whole principal sum so borrowed be repaid and when the whole sum so borrowed shall be fully repaid the rate shall be reduced to whatever may be required to provide for the current expenses.

5. The Municipal Commissioners shall prepare a roll showing the estimated value of each house and building land and the amount of tax thereon to be levied, and such statement shall be open to public inspection for atleast 60 days before any payment of tax under this Act can be enforced.

6. Should any person object to the valuation placed upon his house or land, he may cause the matter to be referred to arbitration in which case the Chairman of the Managing Committee of the Kurrachee Municipality shall name one Arbitrator who is not a Municipal Commissioner and the owner of the property to be assessed shall name one Arbitrator on his part and they shall, if necessary, appoint a referee and the finding of these Arbitrators or the majority of them shall be final.

7. The valuation roll shall not be liable to alteration except on a general revision to be made, if requisite, at intervals of not less than five years subject to which limitation it shall be in the power of a majority of the Municipal Commissioners to order such a revision whenever it may appear to them to be necessary and any difference of opinion between the Commissioner and the owner on the subject of such valuation may be referred to arbitration as above provided in clause 6.

8. The management and control of the waterworks when constructed shall be in the hands of the Municipal Commissioners who shall provide for the proper supply of water in public reservoirs conveniently situated for the rate payers, and any water supplied in any other manner than to the public reservoirs shall be charged at a rate to be fixed by the Municipal Commissioners in addition to the general tax levied under clause (2) and the income derived from the sale of this water shall go to pay for the annual working expenses, establishment, repairs, improvements, etc., any balance being brought to account in repayment of the original loan.

9. For all purposes connected with the protection of the water-works, pipes and cisterns and the prevention of fraudulent practices with regard to the distribution of the water, the Municipal Commissioners shall have authority to draw up rules which after having been approved of by the Government of Bombay shall have force throughout the limits to which the water provided by the Municipal Commissioners is distributed.

10. These rules may be amended or rescinded and new rules made from time to time with the approval of the Government of Bombay.

11. Any breach of these rules shall be punished on conviction before any Magistrate or Deputy Magistrate by fine not exceeding 50 rupees.

12. The tax to be levied under clause 2 of this Act and the price of water charged under section 8 shall be in the first instance payable by the occupant of the premises on which they are assessed, and such tax and price of water and any fines imposed under section 11 of this Act shall be recovered according to the provisions of Act 2 of 1839, by any Magistrate on the application of the Commissioners

Except as otherwise provided in this Act the Municipal Commissioners shall have with regard to the water-works the same powers and responsibilities as they have by Act 26 of 1858.

13. No land or building shall be exempt from the rate on any amount whatever.

14. The account of receipts and disbursements under this Act shall be kept separately by the Municipal Commissioners and shall be submitted to Government annually along with the accounts referred by section 13 of Act 26 of 1850.

H. B. E. FRERE,
Commissioner in Sind.

L (IV) 355—66

No 1736 of 1858.

Public Works Department,

Bombay Castle, 19th June 1858.

Letter from the Commissioner in Sind No. 208, dated the 15th May 1858, submitting Draft of an Act to be submitted to the Government of India and the Legislative Council providing for the raising of funds to supply Kurrachee with water from the Mulleer River.

Resolution of Government on the above, dated the 16th June 1858.

Before submitting the proposed Draft Act to the Bombay Member of the Legislative Council of India, the Right Honourable the Governor in Council requests that the Commissioner in Sind will submit information as to the anticipated annual amount of the proposed tax.

2. Information on this point is required to enable Government to judge as to the number of years in which the maximum sum to be borrowed by the Municipality of Kurrachee, will be repaid.

W. HART,
Secretary to Government.

No. 1564 of 1858.

Public Works Department,

Kurrachee, 25th June 1858.

Forwarded to the Collector with a request that he will refer to the Draft Act and favour me with a rough estimate. Captain DeLisle will, I am sure, assist. It is no use going into details, as the place is increasing so rapidly that the most careful estimate made in one year will be falsified in the next; but it is easy to be on the safe side, by a rough estimate from the present state of things.

H. B. E. FRERE,
Commissioner in Sind

No. 1087 of 1858.

Public Works Department,

Kurrachee, 6th July 1858.

Returned with rough. estimate of amount of tax. The number of houses is estimated from the population allowing 10 persons for Officers' houses and five for those of natives. For the Muchee Meanee only third and fourth class houses have been taken as there are few wealthy natives among the fishermen of Kurrachee. If an allowance of 4 per cent. is to be calculated at present for amortization, the interest at 8 per cent. on ten lacs will be Rs. 80,000 per annum, far more than the estimated out-turn of the tax.

A. DeLISLE, Captain,
Engineer.

Estimated Return of a Tax of 2 per cent. on the houses in Camp and Town of Kurrachee :—

Locality, proportion to each class monthly rent	Population.	No. of houses.	Europeans Rs. 50.	Native. 1st class 1/20 15	Native. 2nd class 3/20 10	Native. 3rd class 6/20 4	Native. 4th class 10/20 1	Total.
Civil Lines of Clifton 10 persons to each house.	138	14	14	...	...	...	...	
Military camp do ...	1,000	100	100	...	...	...	...	
NATIVE POPULATION.								
Military camp 5 persons to each house.	14,729	2,946	...	147	441	882	1,476	
Town do. ...	20,661	4,132	...	206	618	1,236	2,078	
Muchee Meanee fishermen ...	2,073	418	..	...	...	157	261	
Keamaree do. ...	380	76	...	...	...	..	76	
			114	353	1,059	2,275	3 891	
	38,981	...	Rs. 5,700	4,295	10,590	9,100	3,891	33.576
						Annual rent Rs. ...		4,02,912-0-0
						Amount of tax at 2 per cent. Rs. ...		8,058-4-0
						N.B.—Interest on 10 lacs at 12 per cent. per annum Rs. ...		1,20,000-0-0

A. DELISLE, CAPTAIN,
Engineer.

No. 265 of 1858.

Kurrachee, 8th July 1858.

To

His Excellency the Governor
of Bombay in Council.

My Lord,

In reply to the G. R. noted in the margin I have the honour to report that I estimate the gross value of the buildings in Kurrachee at about 55 lacs of rupees; and the return of a tax at 2 per cent. per annum. That sum would amount to upwards of a lac of rupees which represents an interest of 10 per cent. on the total amount of the proposed loan.

No. 1736 of 19th June 1858.
Request that information may be submitted as to the anticipated annual amount of the proposed tax for raising funds to supply Kurrachee with water from the Mulleer River.

2. Should it be necessary to raise the whole sum of 10 lacs of rupees, a somewhat larger revenue will be required than the above in order that the payment of the interest and the extinction of the debt may both be properly provided for and it is possible that the estimate I have above made may be some what over the actual value, I therefore propose that the limit of the tax should be $2\frac{1}{2}$ per cent. instead of 2 per cent.

3. This would represent an annual return of at least $1\frac{1}{4}$ lac of rupees, unless the estimate is much exaggerated and I have every reason to believe that this will not be found to be the case.

If Captain DeLisle's orginal plan be followed and earthen pipes used the expenditure will be much less and a tax of 1 per cent. will probably be sufficient but I have mentioned in the Draft Act a sum which will probably be found sufficient for the greatest expenditure contemplated.

I have, etc.,
(Sd.) H. B. E. FRERE,
Commissioner in Sind.

No. 1741 of 1858.

Public Works Department.

Kurrachee, 13th July 1858.

Copy forwarded for the information of the Collector of Kurrachee, with reference to his memo. No. 1087 of the 6th instant and for communication to Captain DeLisle.

(Sd.) H. B. E. FRERE.
Commissioner in Sind.

No. 2313 of 1858.

Public Works Department.

Bombay Castle, 20th August 1858.

Letter from the Commissioner in Sind No. 265, dated 8th July 1858, reporting with reference to the Draft Act prepared by him for raising funds to supply Kurrachee with water from the Muller River, that he estimates the gross value of the buildings in Kurrachee at about 55 lacs of rupees, and that the return of a tax of 2 per cent. per annum on that sum would amount to upwards of a lac of rupees, which represents an interest of ten per cent. on the total amount of the proposed loan.

Resolution of Government on the above, dated the 4th August 1858.

The Draft Act received from Mr. Frere under date, the 15th May 1858, with the amendment suggested in this letter, should now together with a copy of all the correspondence which has taken place on the subject, be forwarded to Mr. Legeyt for submission to the Legislative Council of India.

(Sd.) MELWILLE, Colonel,
Secretary to Government.

No. 2194 of 1858.

Kurrachee, 2nd September 1858.

Copy forwarded to the Collector of Kurrachee for information in reference to Commissioner's endorsement No. 1741, dated the 13th July 1858.

(Sd.) H. B. E. FRERE,
Commissioner in Sind.

NO. 193 OF 1859.

Kurrachee, 20th June 1859

To

HIS EXCELLENCY THE GOVERNOR
OF BOMBAY IN COUNCIL.

MY LORD,

With reference to Government Resolution No. 2313, dated 20th August 1858, I have the honour to request that Your Lordship will draw the attention of the Bombay Member of the Legislative Council of India to the length of time which has elapsed since the Draft Act for enabling the Kurrachee Municipality to raise money for water-works was sent to him.

2. On consideration I would propose that sections 11 and 12 of the Draft Act should be altered as follows:—

Section 12.—The tax to be levied under section 2 of this Act and price of water charged under section 8 shall be in the first instance payable by the occupant of the premises on which they are assessed and if not paid within 30 days after the date on which the payments fall due shall be levied from him by distraint by the Collector of Kurrachee on formal application made to him by the Secretary to the Managing Committee.

Section 11.—Any breach of these rules shall be punishable on conviction before any Magistrate by a fine not exceeding Rs. 50.

3. With these exceptions I see no part of the draft which calls for amendment.

(Sd.) H. B. E. FRERE,
Commissioner in Sind.

No. 1890 of 1859.

Bombay Castle, 18th July 1859.

Letter from the Commissioner in Sind No. 193, dated 20th June 1859, requesting that the attention of the Bombay Member of the Legislative Council of India be drawn to the length of time which has elapsed since the Draft Act for enabling the Kurrachee Municipality to raise money for water-works was sent to him and proposes certain alterations in sections 11 and 12 of the Draft Act.

Resolution of Government on the above, dated the 13th July 1859.

A copy of Sir Bartle Frere's letter should be forwarded to Mr. Legeyt and his attention directed to the amendment therein proposed in the Draft Act forwarded with Government letter No. 2314, dated the 28th August 1858.

2. Mr. Legeyt should at the same time be reminded of the time which has elapsed since the Act was forwarded to him.

(Sd.) K. YOUNG,
Chief Secretary to Government.

No. 1758 of 1859.

True copies forwarded to the Magistrate of Kurrachee for communication to the Municipal Commissioners.

(Sd.) H. B. E. FRERE,
Commissioner in Sind.

Kurrachee, 5th August 1859.

Proceedings of a General Public Meeting of the Kurrachee Municipal Commissioners and rate payers held pursuant to notice at the Collector's Kacheri on Friday, the 30th September 1859, to take into consideration the provisions of a Draft Act for the better supplying with water the Town and suburbs of Kurrachee.

PRESENT.

Sir Bartle Frere, K.C.B., Commissioner in Sind, in the Chair. General Hale, Brigadier Adams, C.B., Mr. Bellasis C.S., Mr. Stewart, C.S., Majors Goldsmid, Marston, Murray, Captains Bolton MacDonald, John Dunsterville, Church and Meerrian, Dr. Burns, Revd. Mr. Carr and Revd. Mr. Strickland, Messrs. Hill, Ingle, Dalzell, Neville Warren, Middleton, Worthington, Nelson, Barret, Thornton, Degama, Mathieson, Wood, Elander, Ghulam Hassan K. B., Foujdar, Seth Naomull, Seth Khemchand, Dinshaw, Perozeshah, Dewan Patolee, Pestonji, Hurmusjee, Nowrozjee Meerwanjee, Meerwanji, Kursetji, Jamsetjee Aidaseer, Syed Ammoodin Moorad Khan, P. Hewitt and many others.

The Chairman opened the proceedings by stating the object of the meeting. He pointed out that Sir Charles Napier in fixing the site of the Camp of Kurrachee placed in its present position in preference to the more eligible and salubrious site of Ghizree purely from the difficulty of obtaining a supply of water at the latter place. Sir Charles, knowing the importance of a good supply of water directed his attention to this subject and employed the most able Engineers at his disposal to make surveys and to ascertain whence water could best be supplied. Captain (now Lieutenant Colonel) Baker of the Bengal Engineers drew up a plan which met with the full approval of Sir Charles Napier. It was substantially the same as that which had been repeatedly since brought forward and was now before the meeting. The Chairman then described at great length the causes which had led to repeated postponement of the measure and to its being as often brought forward with more or less modification twice by Captain Hill and more lately by Captain DeLisle, whose plans have been entirely approved by Colonel Walter Scott and Henry Turner, two most

competent judges. These plans had been submitted to Government who stated their willingness to assist by providing the necessary legal powers and by paying their own fair share of the expense but added that the plan as a whole must be undertaken by the Municipality. The Act now before the Legislative Council was the result. It had been twice read and would be read a third time on 24th November next preparatory to its being passed. It was the object of this meeting to consider the provisions of the Draft and see if any improvement or amendment could be suggested. The Chairman then went through the clauses of the Act in detail explaining their purport and application, and concluded by suggesting that any proposition that might be carried at this meeting be referred to a Committee who should embody any amendments in the form of the petition for submission to the Legislature.

A protest signed by the Captain Vincent, Dunsterville, &c., was then handed by Captain Church and having been read the following propositions were then put.

I. Proposed by Mr. Neville Warren, seconded by the Revd. W. Stickland, that—

> This meeting consider that in the bill for obtaining a water-supply in Kurrachee, clauses should be inserted making it obligatory on the Commission to lay small mains from the great supply mains, through thoroughfares in Camp, for supplying water to the houses at present lining the roads or hereafter to be built.

Carried.

II. Proposed by Mr. N. Warren, seconded by Mr. A. F. Bellasis—

> That a Committee be appointed to draw up clauses to amend the Act in reference to the inconveniences of supplying water and levying the rates with a view specially to relieve occupiers of houses and not owners from liability to increased charges before the water is actually supplied. That the Brigadier Commanding the Station be requested

to nominate with the sanction of the General of the Division two members to represent the interest of Camp residents and that Mr. N. Warren and Mr. J. M. Shaw Stewart be requested to represent householders, not of camp.

After much discussion on the proposition the following amendment was then put.

III. Proposed by Brigadier Adams, C. B., seconded by Major Murray—

That Camp limits including as in the Bill Ghizree and Clifton be entirely excluded from all regulations in connection with the Bill until the ideas and wishes of the Commander in Chief on the subject are known.

After a discussion on the subject the question was put to the vote when there appeared for the amendment 11 against 29. The amendment being lost and the original proposition having been put was carried by a large majority.

The thanks of the meeting were then voted to the Chairman for his able conduct in the chair and the meeting adjourned *sine die.*

To

THE CHAIRMAN OF THE MEETING ASSEMBLED TO TAKE INTO CONSIDERATION THE DRAFT ACT FOR THE SUPPLY OF WATER FOR KURRACHEE.

SIR,

As my absence from the meeting assembled to-day to take into consideration the Draft Act of the Legislative Council of India, for supplying water to the town and suburbs of Kurrachee, might be construed into a tacit approval of its provisions, I request you will be so good as to read to the meeting this my dissent.

As a resident of the Cantonment I object to this Act, as it is, I believe, an unexampled attempt on the part of a Municipality to levy taxes within a Military station and I am convinced that if this deviation from Military usages were brought to the notice of Government, it would cause the concluding section of the Act to be expunged.

The fundamental principle of Municipal taxation is that rates are self imposed, either by the rate payers themselves or their representatives and it is a notorious fact that in the case of this Act this first principle has been entirely departed from, for not only have the Camp residents never assented to this tax, but they have never even been consulted thereon, and it is equally well known that they are unanimous and decided in their opposition.

It might be supposed from this neglect of the wishes of the Camp residents that the proportion of the tax to be borne by them would be small but I believe the contrary is the case and that if a proper enquiry were made it will be found that the larger share of the burden would fall on them.

The mode in which it is proposed to levy this rate is unjust as it falls heaviest, not on the largest consumers but on the inhabitants of the most expensive houses, and it creates this anomaly, that in very many cases rate payers are called to incur great risk and heavy taxation to procure the supply of an article at a dearer rate than it is now obtainable.

I have, etc.,

(Sd.) H. VINCENT,
Captain, Paymaster,

I concur generally in Captain Vincent's remarks.

I do not attend the meeting because, until it shall have been decided by the proper authority that Military officers in a Military Cantonment are liable to Municipal taxation, I cannot consider myself among the class of rate payers who are now invited to attend a meeting of the Municipal Commission.

I may however remark that if the Municipal Commission in carrying out their object of introducing a supply of good water into Municipal limits are content to receive a fair remuneration from the residents of Cantonments who avail themselves of the advantage. This object, I think, might be better attained in the legitimate manner than by what is considered an attempt to impose an obnoxious and arbitrary tax on the Cantonment; this attempt being made in the form of a clause introduced into an Act which is now before the Legislative Council, classing the Cantonment as a part of the subrubs of the town of Kurrachee on which, in point of fact it is notorious that the Cantonment in no respect whatever depends.

(Sd.) YOUNGHUSBAND.

Kurrachee, 30th September 1859.

I concur with Captain Vincent and Colonel Younghusband.

(Sd.) DUNSTERVILLE.

30th September 1859.

To

SIR BARTLE FRERE, K.C.B.,
COMMISSIONER IN SIND.

10th October 1859.

SIR,

Having been appointed with Mr. Neville to act on a Committee for amending the proposed Bill for providing water-supply, I asked Colonel Younghusband to inform me when Brigadier Hale would appoint two members on behalf of the residents in camp, and received a reply, that as the Brigadier has met with refusals from officers to sit upon the Commission he intended to have the question to be decided otherwise. Under these circumstances I beg to ask for further instructions.

It is very desirable that the Act should be carefully considered, and Mr. Warren and I are ready to revise it, and submit a report on it but we think that another member should be put on the Committee and would suggest that W. J. Macdonald be requested to act with us, as he is well acquainted with the views and wishes of the officers holding houses in Camp.

I have the honour to be

Sir,

Your most obedient servant,

(Sd.) M. J. SHAW STEWART

No. 1416 of 1859.

General Department,
Kurrachee, 14th October 1859.

To

M. J. SHAW STEWART, Esq.

Sir,

I reply to your letter as per margin, I have the honour to inform you that I shall be obliged if Lieutenant MacDonald will sit as a member of the Committee, and that you then favour me with your views on the matter.

Letter, dated 10th October 1859, intimating that the Brigadier has met with refusals from officers to sit on a Committee for amending the proposed Bill for providing water-supply and recommends that Lieut. J. MacDonald be requested to act with the Committee.

I have, etc.,

(Sd.) H. B. E. FRERE,
Commissioner in Sind.

NO. 1417 OF 1859.

Dated the 14th October 1859.

To

LIEUTENANT J. MACDONALD,

Revenue Surveyor, Kurrachee.

SIR,

I have the honour to request, if you have no objection, that you will act as a member of the *Commitee appointed to consider the proposed bill for providing a water-supply in Kurrachee.

*Messrs. M. J. Shaw Stewart and J. Neville Warren.

I have etc.,

(Sd.) H. B. E. FRERE,
Commissioner in Sind.

COMMISSIONER'S OFFICE,

Kurrachee, 14th October 1859.

From

M. J. SHAW STEWART, ESQ.,
Assistant Commissioner in Sind;

J. NEVILLE WARREN, ESQ.,
Agent, Sind Railway Company;

LIEUT. J. MACDONALD,
Bengal-Assam,
Revenue Surveyor in Sind;

To

THE COMMISSIONER IN SIND.

Dated, 20th October 1859.

SIR,

On the 30th September, at a public meeting of the Municipal Commissioners and rate payers of the Town of Kurrachee held in the Collector's Kacheri, the following resolutions were passed.

1. That this meeting considers that in the Bill for obtaining a water-supply in Kurrachee, clauses should be inserted making it obligatory on the Commission to lay small mains from the great supply mains, through thoroughfares in Camp, for supplying water to the houses at present lining the roads or hereafter to be built.

2. That a Committee be appointed to draw up clauses to amend the act in reference to the inconvenience of supplying water and levying the rates, with a view specially to relieve occupiers of houses and not owners from liability to increased charges before the water is actually supplied. That the Brigadier Commanding the Station be requested to nominate with the sanction of the General of the Division two members to represent the interests of Camp residents, and that Mr. J. N. Warren and Mr. M. J. Shaw Stewart be requested to represent house-holders not of camp.

2. Some difficulty having been experienced in procuring Military officers willing to sit on the Committee, you requested us to take the subject into our consideration, and communicate our view to you.

3. Accordingly we met on the 15th instant and have the honour to report as follows :—

4. We consider that it would be highly expedient that some provision should be made to ensure to every house-holder a service main pipe being available near enough to permit of a smaller supply pipe being easily attached; and to ensure this, it appears to us that the following two alterations are requisite :—

1st. In Section I, we would omit the word "and" after "reservoir" and after the word "wells" we would insert the following words "aqueducts and other works, and shall lay down such main pipes and main distributing pipes".

2nd. In Section IX, we would insert a provision that besides supplying water in public reservoirs, the Municipal Commissioners shall likewise be required to arrange the main distributing pipes, so that each rate payer shall have one within 150 yards of his house, from which he can lay on a smaller supply pipe if he requires it; and if no such main distributing pipe shall be within 150 yards of his house, that the Municipal Commissioners shall lay down a smaller supply pipe to his house from any convenient point, and shall pay for the cost of the pipe over and above 150 yards; and further, that in every case the Municipal Commissioners shall be required to lay down the smaller supply pipes, on demand of the owner, charging for such work at a fixed rate per foot, and that they shall also keep them in repair on the owner's requisition at his expense.

5. We would leave it to the Legislative Council to provide any means of compelling the Municipal Commissioners to do their duty in this respect. We think that after the main supply and distributing works are completed the Commissioners should have no power to levy rates in any case where they fail to give proper facilities for supplying water, until such facilities be given. This exemption might be enforced against the Commissioners on application to the Chief Commissioner in Sind.

6. With regard to the 2nd proposition, we are of opinion that the protection required will be obtained by inserting the

following words after the words "recovered from him" in Section XI.—

"Provided always that no owner of any house shall be considered to have a right to demand or to levy any increase of rent from the occupier in consequence of the water rates imposed on him under this Act until the water shall have been admitted into the main distributing pipes within 150 yards of his house".

7. We have considered likewise an application made by some of the chief native rate payers in the town, that provision should be made for obtaining the necesssary funds by an increase of all or some of the present Municipal taxes rather than by a house tax, and we think that the cost of living in Kurrachee is already so great for the poorer classes, that it should not for the present be enhanced by any increase in the taxes, which like the Municipal taxes press equally on all without regard to their property but that the cost of the water works should be chiefly defrayed from the proceeds of some tax calculated, like the proposed house and land tax, to fall upon those whose property will be principally benefitted by the supply of water: we therefore do not recommend any alteration of the nature proposed.

8. As regards Section III of the Bill, we would suggest that no rate be imposed without the sanction of the Chief Commissioner in Sind. The section as it stands gives the Commissinoners power to impose the rate, and leaves to the Chief Commissioner, on the representation of the Municipal Commissioners, the power to fix a less amount rate. We would leave it to the Municipal Commissioners to fix from time to time, with and by the sanction of the Chief Commissioner, such annual rate not exceeding two per centum on the value as may appear requisite for the due prosecution of the works, and fulfilment of the provisions of the Act.

We have, etc.,

(Sd.) M. J. SHAW STEWART,
„ J. N. WARREN,
„ J. MACDONALD,

Kurrachee, 20th October 1859.

No. 346 OF 1859.

Kurrachee, 24th September 1859.

To

HIS EXCELLENCY THE GOVERNOR OF
Bombay—Council.

MY LORD,

I have the honour to submit for transmission to the Bombay Member of the Legislative Council a report prepared by a Committee appointed to consider the Bill for ensuring a better supply of water to Kurrachee and I beg to recommend that he should be instructed to forward the bill with the modifications proposed in this report which embraces all the alterations which seem to me to be necessary.

I would merely support for the consideration of the Legislative Council that in this and all Acts of Legislature the name of the Province should be spelt in the manner which most readily expresses the sound of the Native name and which is now generally used throughout it, *viz.*, Sind.

I have, etc.,

(Sd.) H. B. E. FRERE,
Commissioner in Sind.

Memorandum on the papers relating to the Act for supplying Kurrachee with water, submitted in obedience to the note of the Secretary to Government, Military Department, dated 3rd November 1859.

1. A brief history of this scheme will best prove how far the objections stated it in these papers are well founded.

2. Soon after the conquest of Sind, Sir Charles Napier, finding the want of good drinking water the one great drawback to the station of Kurrachee, as a large garrison, employed Colonel (then Captain) Baker of the Bengal Engineers to devise means for supplying the want.

3. Captain Baker submitted a plan for bringing in water by pipes from the Mulleer, a perennial stream about 13 miles distant.

4. The plan was highly approved by Sir Charles (about 1844-45) and sent for sanction to Calcutta.

5. There it was referred to the Military and Medical Boards, and sent back to Kurrachee for further report on some comparatively unimportant points.

6. Sir Charles ordered the additional information which was asked for to be collected. One portion required the assemblage of a Medical Committee which treated the question rather as bearing on Medical controversies then raging at Kurrachee, and expressed opinion which Sir Charles Napier saw would lead to further discussion and possibly to the rejection of the whole scheme. He was then starting for his hill campaign, and laid the matter aside till his return: and the Sikh war and other matters further postponed its consideration: and he quitted Sind before any reply was sent to the reference from Bengal. Days of financial difficulties and general postponement of all public works followed, and nothing had been done up to 1851, when on his way home as Ex-Commander in Chief in India, Sir Charles, visited Kurrachee.

7. He then told me the history of the scheme, and urged me to reagitate it whenever opportunity might offer, as the thing more required than anything else to make Kurrachee a good station for a garrison.

8. No one could live a week at Kurrachee without being convinced of the soundness of this opinion.

9. After a few months Captain Hill revived discussion by proposing that the aqueduct should be made and water brought in as a preliminary to the construction of the European Barracks, whereby about half a lac of rupees might be saved in the estimate for those barracks, as all the water for building would otherwise have to be brought 2 miles by Bheesties and water-carts.

10. The suggestion was not adopted, and the barracks were built—but as the town increased, the want of good water was each year more severely felt, and at last, when a Railway was projected, a better supply of water became a matter of pressing urgency.

11. It was put into the hands of Captain DeLisle, who slightly modified Colonel Baker's original plan and increased the estimate. In this form it was submitted to Government who replied that the matter was clearly a Municipal one, and should be provided for by Municipal taxation, fresh facilities for which had been lately granted to Kurrachee.

12. Accordingly, with the aid of the Agent for the Railway Company who had seen a good deal of such schemes in England, the plan was revised and again brought forward as a Municipal scheme to be executed with money borrowed on mortgage of Municipal income.

13. For all this a special enactment was required and a Draft Act was submitted and sent to the Legislative Council.

14. Up to this point, nothing had been done without continual reference to the Military Authorities. The plan was and is substantially the same as was devised as a purely Military scheme by Colonel Baker at the command of General Sir

Charles Napier. In every one of the later steps, the Brigadier Colonel Parr, and the Bazaar Master, Captain Ashburner had a principal share, and as the Draft Bill left Kurrachee, it was entirely concurred in by all authorities, Military and Civil.

15. Nothing was done regarding it during the years of Mutiny but after one or two appeals from Kurrachee, it was brought forward a few months ago in a slightly altered shape, and read 1st and 2nd time and published.

16. In the mean time, most of the Military functionaries had been changed; neither the General Commanding the Division, nor the Brigadier Commanding the station, nor the Brigade Major, nor Bazaar Master had been in their present appointment when the original Draft of the Act was under discussion; and none of them knew what had been done—nor by whom nor why.

17. A misunderstanding unfortunately arose as to the meaning of the Bill as soon as it was published at Kurrachee, and I did not become aware of the misunderstanding till some time after. It was generally believed by the inhabitants of Camp that a tax of 2 per cent. was to be at once imposed, and that the consequent supply of water was at least doubtful. Hence the present appeals through the Commander-in-Chief, which I have every reason to believe would have been very much modified, even if they had been submitted at all, had the provisions of the Draft Act been explained to the memorialists and the present Military Authorities of the station—or had any reference for explanation been made to me before addressing His Excellency the Commander-in-Chief.

18. As soon as it was convenient, after the Bill in its present form was received at Kurrachee, a public meeting was at my suggestion called by the Collector, at which all the inhabitants of Kurrachee, Camp and City were invited to attend. A large number of all professions and classes did so attend, and the matter was very fully discussed.

19. Two or three obvious defects and omissions in the Bill were pointed out, and the means of supplying them suggested. It was resolved to appoint a Committee to put these

into shape and the Brigadier-General-Commanding the Division was applied to nominate members to the Committee to represent to interests of Camp residents.

20. No one was however appointed, mainly I believe because those who had at first expressed themselves most strongly, were not willing to serve on the Committee. The Committee had however the advantage of several valuable practical suggestions from Brigadier-General Hale, Commanding the Division, Brigadier Adams, Commanding the Station, and Major Murray, Commanding Depôt of Her Majesty's troops, and these suggestions together with others offered by Mr. Neville Warren, the Agent, W. J. Brunton, the Engineer, of the Railway Company, were embodied by a Committee in draft sections to be added to the Bill, and have been submitted through the usual channel to Government in the General Department. I would beg that these proceedings may be referred to, as they will satisfy His Excellency the Commander in-Chief that all the reasonable objections now stated to the Bill had been anticipated, and remedies for them suggested before the present appeal reached the Commissioner.

21. Colonel Hart, the Chief Engineer, is now engaged in further revising the scheme and putting it in a shape for speedy execution. He will, I am certain, pay every attention to the views of Brigadier-General Hale, and I have no doubt that the result will be to remove all grounds of reasonable objection from any quarter.

22. I will now briefly notice some of the objections taken in the papers now forwarded.

23. OBJECTION 1ST.—"*There is now no want of good water—the proposed taxation to bring in water is unnecessary—vide* petition of inhabitants of Camp to Bazaar Master, and Brigadier-General Hale's letter, para. 3.

This is in some respects a matter of opinion. Many an old seaman will assure his passengers and will himself believe that they have an ample supply of water when reduced to an

allowance of a pint per diem. In the desert, a well a mile off which supplies each house-hold with a couple of jars of drinkable water daily affords a supply which to the people of the desert seems abundant, and I know more than one locality where the best water is so saline that pure river water seems insipid to those who have been accustomed to impure fluid.

24. But judged by any ordinary standard, there can be no doubt of the notorious fact that the supply of water at Kurrachee is scanty, precarious, and of very inferior quality.

25. The wells whence the water is drawn are from one to five miles distant from the places where the consumers live. No later than the August last, just before rain fell, the scarcity was so great that we had it in contemplation to propose to the Military Authorities to diminish the consumption by sending all the cattle which could be spared to a place 12 miles off to drink. The rains are very precarious. We have of late 9 years of occasional rain following 9 of comparative drought and may now expect a cycle of years of drought to recur: the distress which will ensue to the greatly increased population from the consequent limitation of supply of water, will be very severe, unless averted by some plan for bringing in water from a distance.

26. The present supply from even the best wells, though the permanent inhabitants get used to it and it does not disagree with them, has on all new comers the effect of a weak solution of epsom-salts; hardly any new arrival escapes inconvenience and often severe suffering for the few first weeks of his stay, and to some persons of delicate organization and on invalids the injury is considerable and permanent. There is no gainsaying the fact which is vouched by the effects on the stomachs of 9 out of 10 of all un-prejudiced new comers.

27. OBJECION 2ND.—"*Neither the views nor wishes of the residents in Camp have ever been sought, or their interests consulted in any way*"—*Vide* Brigadier-General Hale's letter para. 2nd.

28. I have in the above summary pointed out that this is a mistake. After General Hale's letter was written, the former correspondence was sent to him by the Collector, and I believe he is now quite satisfied that all* who have had anything to do with the scheme were Military Officers: there were only two or three persons who were not either Military Officers in Military employ or residing within Military limits. It was in fact entirely a Military scheme, necessary in the first instance for Military purposes; the rapid increase of the town and port has since given the subject commercial importance.

* Sir Charles Napier.
Colonel Baker.
Captain Hill.
Colonel Turner.
Captain DeLisle.
Captain Ashburner.
Colonel Parr.
Mr. Gibbs, Major Preedy, Mr. Bellasis } Residents of Camp.
Mr. Neville Warren, who at the time he drafted the Act resided within Camp limits.

But it has ceased to be a purely Military work, mainly because Government cannot spare many lacs of rupees to execute it, and its undoubted advantages render the non-Military portion of the community ready to submit to taxation in order to secure its benefits. So far from the inhabitants of the Camp having been neglected or not consulted, all who took any interest in the matter were referred to when the Draft Act was first prepared, and the interests of Camp were specially consulted Every means was adopted at the time to ensure publicity, but all this occurred before the present incumbents in the principal Military appointments arrived in Kurrachee; they were thus unaware of what had been done, and were unintentionally led into error.

29. OBJECTION 3RD.—"*The scheme should be executed and it should be left optional to the inhabitants to avail themselves of it or not as they please*"—petition of inhabitants of Camp and Brigadier-General Hale's letter para. 3.

I need hardly observe that this option cannot be left to the public inasmuch as a large preliminary outlay is required which can only be provided for by borrowing, and no lender will risk his money unless payment of the interest can be made compulsory.

30. OBJECTION 4TH.—"*The Bill authorises a novel and undesirable power of interference within Military limits conceded to Civil Authorities.*"—Brigadier Hale and Brigadier Adams.

This latter seems to me a perfectly valid objection and may be met in two ways—

In consideration of all property in Camp being held subject to the absolute control of Government, Government may advance the proportion of the sum total due by house property in Camp, or at any rate undertake to be answerable for the responsibilities of such property, reimbersing themselves to such extent as they think necessary by taxing private property; or,

Secondly they may allow the Act to be worked through the Camp Authorities. The former would, I think, be the simpler and easier plan, and need not entail a shilling of risk on Government.

31. OBJECTION 5TH.—"*The Act levies a tax of 2 per cent. on all house property, but the expenses of bringing in water by Beehshtees will remain as before*"—Brigadier Adam's letter para. 5.

32. This is a mistake; the 2 per cent. is the maximum of taxation which it will be legal to impose, the actual expense is estimated not to exceed $\frac{1}{2}$ per cent. and even that it is estimated will pay off the cost of works within 25 years, leaving the house property with a great supply of water nearly, if not quite, tax free. The charge for Beehshtees will be very greatly reduced even without service pipes: it will of course be cheaper to get an abundant supply of good water by Beehshtees from a public reservoir within a few hundred yards than as at present to get bad water from the well, it may be 1 or 5 miles distance.

33. To all the other objections stated in the letters of the Brigadier—General and the Brigadier, an answer has been incidentally given in the above summary of proceedings. It was quite accidental that the present Military Authorities at Kurrachee were not earlier informed how the case really stood and relieved from the misapprehension under which they laboured. I have since received much valuable advice and

assistance from them in the revision of the Bill, and I trust they need no assurrance from me that nothing was further from the intentions of the promoters of the scheme, than in any way to supersede their authority or to keep them in the dark regarding a measure of so much importance.

34. Respect for H. E. the Commander-in-Chief forbids my entering into any detailed examination of the Quarter-Master General's letter. I trust that the proceedings in the General Department, especially the small printed fesciculus of papers commencing with Captain Baker's memorandum and ending with the report of the Committee on Captain DeLisle's scheme will be sent for His Excellency's perusal; he will then I am sure acquit the Municipality and myself of any intention to commit any of the irregularities, discourtesies and violations of all rule and precedent implied in Colonel Phayre's letter, and I feel equally certain that Colonel Phayre will expercience some feeling of compunction that any letter from his department should have delayed the long pending execution of one of the cherished schemes of his great master, the only plan that I even heard of by which Sir Charles Napier proposed to bring water to Kurrachee.

35. In one of Sir Charles Napier's private letters printed in his life, if I remember rightly, he speaks of bringing water from the Indus, but this was a mere floating idea, and the plan now referred to, matured, and recommended for sanction by him, was I believe the only one for supplying drinking-water which ever was seriously entertained by Sir Charles Napier or went the length of a reference to an Engineer's office.

(Sd.) H. B. E. FRERE,
Late Commissioner in Sind.

Bombay, 18th November 1859.

No. 2215.

Dated Fort William, the 2nd November 1859.

To

THE SECRETARY TO THE
GOVERNMENT OF BOMBAY.

SIR,

I am directed to forward the accompanying copy of a Memorial, dated the 1st ultimo from certain house and land-holders of Kurrachee, praying that approval may not be signified to the passing of the Act to provide for the better supplying of water to the town and suburbs of Kurrachee, and to request that, with the permission of the Right Honourable the Governor in Council, a report may be submitted upon the subject.

I have &c.,

(Sd.) R. B. CHAPMAN,

Under Secretary to Government of India.

The humble petition of the undersigned being the principal house and land-holders of the town of Kurrachee.

To

THE RIGHT HON'BLE VISCOUNT CANNING,

Viceroy and Governor-General of India and President of the Legislative Council of India, Calcutta.

MOST RESPECTFULLY SHOWETH,

That in accordance with a notice which appeared in the advertising columns of the Sind Kassid of the 30th September 1859, a meeting of the Municipal Commissioners was convened at the Collector's Kacheri at Kurrachee and the rate payers having been invited a good number attended when Sir Bartle Frere in the chair read out the draft of an act empowering the Municipal Commissioners to lay fares on all landed property to the extent of two per cent. on the value of that property for the purpose of bringing a plentious supply of good water from the Mulleer for the use of the inhabitants of the town and its suburbs including the Cantonments of Kurrachee and the shipping coming into Harbour.

We your Lordship's petitioners with all due deference beg to state that God has been pleased to furnish the town and suburbs of Kurrachee with a plentiful supply of water, that we have it in abundance, and to spare. That there was scarcity of water, it could not be obtained from the Mulleer face at this moment, there is none in the Muller, there is not sufficient for the few cultivators on its banks. It is only in the rainy season or rather when it rains that water is to be found flowing down its bed. The persons with whom this scheme originated must have visited the Mulleer either during or immediately after the rains.

We the undersigned beg leave to state that at this meeting of the Municipal Commissioners a proposition was made to oppose the Act in all its bearings and was carried unanimously. We therefore humbly but earnestly pray your Lordship will on our account prevent the passing of the Act in question which we believe is laid before the Legislative Council of India on the 4th November next. Our motive for opposing the Act is the utter impossibility of the scheme succeeding; and even if there was a probablity of its succeeding, we should be equally opposed to it in its present form because the whole weight thereof is laid upon us which is in our opinion unjust and oppressive. If Government or the Municipality are in want of funds to enable them to commence or carry out any great scheme, let them increase their several imposts when all will bear the burden equally and no one will have cause to complain. In the hope of our prayer being granted we subcribe ourselves your Lordship's very loyal and humble servants.

Kurrachee, 11th October 1859. (Signature.)

No. 2377 OF 1859.

PUBLIC WORKS DEPARTMENT.

Dated the 30th November 1859.

To

THE COMMISSIONER IN SIND.

SIR,

I have the honour to acknowledge with your endorsement as per margin, a petition of the principal house and land-holders of the Town of Kurrachee praying that the proposed bill to provide for better supplying with water the town and suburbs of Kurrachee may not be passed.

No. 2990, dated the 25th November 1859.

2. The reasons urged by the petitioners against it are, that the town is already supplied plentifully with water, that the scheme proposed, which is to bring water from the Mulleer River, would fail, the supply in that river being insufficient; and because the whole weight of the tax would fall upon the landed proprietors.

3. The inhabitants of the Town obtain their water from the bed of the Lyaree, a hill torent which sweeps fast the back of the town. Its bed is dry except when rain falls for a day or two in each year. The water is obtained from pits or holes dug in the sand, and is slightly brackish and indifferent both in taste and appearance; the inhabitants of the town have known no other, and from custom are satisfied with it. The supply so obtainable is sufficient for drinking purposes, and it is obtained by them at no expense, as the females of each house-hold bring it to their houses.

4. To anyone who has been accustomed to good water, that procurable at Kurrachee is at first, very impalatable, and occasions diarrhoea; but inhabitants of the town, from long use, consider it passable and not inimical to health.

5. The petitioners have dwelt particularly on the inadequacy of the Mulleer River to supply the requirements of the

town—but the proposed Act provides simply "for a complete system of water-works" without any reference to the source from which the water is to be obtained. The Mulleer River (distant 12½ miles from the Cantonment) has certainly been thought of as one of the principal sources from which water is to be drawn, but its sufficiency would of course be enquired into and tested by competent Engineers, ere any scheme dependent on it would be commenced. The petitioners have erroneously considered, I believe, that the flowing stream in the Mulleer was intended to constitute a supply for the town. The stream in question is limited to a small rivulet, except when rain falls when it becomes a rapid river; but it has been proposed to dig large wells in its neighbourhood from which, the general opinion is, that abundant water of superior quality would be secured. The water actually in the bed of the river, to which petitioners object as insufficient, would therefore probably not be made use of at all. There are small kutcha wells in the Mulleer valley from which excellent water is procured, and it is hoped that large wells would be equally successful. However, if the scheme were determined on, all this matter would be fully investigated. My own anticipation is that water would be brought from several points; the supply from the town might, in that case, be obtained from a source nearer than the Mulleer.

6. The water-tax will certainly press directly on the house and the land-owners who are considered to be the parties who will be mostly benefitted and who would be therefore justly called on to pay. The other alternative is to sell the water to those who like to buy, but this arrangement would be attended by inconvenience and uncertainty and would not create the means, or give rise to the loan from which the works are to be constructed.

7. There are two other causes which, though not mentioned in the petition, are, I am aware, instrumental in causiug the inhabitants to make the objection and I will accordingly bring them to notice.

8. The first is, that it has been proposed to commence the water-tax immediately. The impression is that the 1st of January next is the date proposed for their institution. The

contemplated system of water-works will necessarily take a long time say three or four years to mature and bring into working order; in the mean while the inhabitants will have to pay for water which they do not get, and for constructing a gigantic system, the details of which are, as yet, unknown to them, and the success of which they consider doubtful.

9. The second is that, some of the inhabitants entertain objections to the use of water, public to all and which cannot be drawn by themselves; their prejudices would stand in the way of their using it—specially if the water be raised by "mots" made of hides, or came in contact with any substance other than their own drinking vessels, this prejudice however would probably yield in the course of a little time.

10. In this report I have refrained from allduling to other than the towns people. The residents of the Cantonment have special reasons besides those mentioned above, for objecing to the tax, and which I am not called upon to bring forward here.

Kurrachee, 30th November 1859.

I have etc.,

(Sd.) J. DUNSTERVILLE,
Acting Collector of Kurrachee.

No. 3030 of 1859.

PUBLIC WORKS DEPARTMENT.

Returned to the Collector of Kurrachee, with a request that he will enquire and report whether the petition to the Viceroy and Governor-General of India was a *bonafide* production, and whether it expresses the general feeling of the house and land-holders of Kurrachee.

COMMISSIONER'S OFFICE,
Kurrachee, 2nd December 1859.

(Sd.) J. JACOB,
Commissioner in Sind.

L (IV) 355—70

No. 2425 of 1859.

PUBLIC WORKS DEPARTMENT.

Dated 6th December 1859.

To

THE COMMISSIONER IN SIND.

Sir,

I have the honour to acknowledge your memorandum No. 3030, dated 2nd instant, and to inform you in reply that in order to carry out, in the fullest manner possible, the enquiry therein directed, I invited the inhabitants and house-holders of the town of Kurrachee to meet me at the Kardar's office yesterday afternoon the 5th instant.

2. Accordingly, I was met by the principal Seths, the heads of tribes and castes, the Kazee, the members of the Panchayat, the principal Mahomadans, the chief traders, the few Parsees who live in the town and by all residents and house-holders who had any active interest in the matter.

3. They informed me that the petition to the Viceroy and Governor-General of India was a *bonafide* production. That it contained upwards of a hundred signatures; many of them there present informed me they had signed it, and the whole assembly represented that the prayer contained in it exhibited their unanimous feeling in the matter; that the petition was a spontaneous act intended to represent their disinclination to the proposed measure. That they had made a petition to the Government of Bombay and apprehensive lest the Act might be passed and made law ere their representation had time to reach through that channel, that they had submitted this petition direct to the Supreme Government at Calcutta.

4. They informed me also, that they had objected to the proposed scheme so far as it had reference to the town, because they had abundance of water, and were fully content

with its quality; that almost every respectable house had its kutcha well in the yard, the water from which served them for washing purposes, and that the members of their house-hold brought a pot-full of drinking water from the adjoining Lyaree River-bed, and that those who could afford it, or would not take the trouble of bringing it could get it brought to their door at a cost of 1 or 2 pies for a large pot-full. Under these circumstances they represented, they did not perceive the expediency of taxing themselves, to obtain an object which they already possessed and were content with.

5. I pointed out to them that the supply in the Lyaree, in seasons of drought, became liable to failure and that it would be preferable to have a clean and desirable supply, rather than continue to resort to the dirty pits in the Lyaree bed, but they urged that these pits or holes constituted in their opinion, the only method of obtaining the water sweet; that after a pit had been opened for 20 days or so, the water in it became brackish when another hole was opened; that for the first few days after a new pit was opened the water was perfectly sweet, and they argued that on the same principle, any well or system of water-works in their neighbourhood would deteriorate in like manner. And they stated that the supply of drinking-water had never within their recollection, failed and it was not likely to do so hereafter.

6. They also argued that the Muncipality had already paid for a very large well constructed on the bank of the Lyaree, for the benefit and supply of the town, and they wanted to know why, on the completion of the intended channels therefrom, any further scheme was considered necessary for them.

7. They allowed that it was most necessary the shipping at Keamaree should be provided with water, but they contended that the scheme intended for that object should be defrayed from general taxes on the trade of the port, and should not be made to fall on the house-holders of the town.

8. In short, they confirmed all what was represented in the petition, and begged of me to aid them in conveying their feelings of opposition to the proposed measure.

9. I would fail therefore to fulfil my duty if I did not report their marked and very decisive opposition to the project. Not one of them, though I called on each party by name, would say a word in favour. On the contrary they would instruct each other in objecting to it.

10. I feel sure that at the bottom of the matter lies their objection to the house-tax, an impost which of all others, is particularly disgraceful to a Sindhi community. I think if the expenses were made to fall generally, by increasing the rates of Municipal taxation, that the scheme could yet be carried out with their free will, after allowing time for the present feeling of opposition to pass away.

I have etc.,

(Sd.) J. DUNSTERVILLE,
Acting Collector of Kurrachee.

COLLECTOR'S OFFICE,

Kurrachee, 6th December 1859.

No. 2911 of 1859.

PUBLIC WORKS DEPARTMENT.

Bombay Castle, 17th November 1859.

Document to whom sent.	For what purpose.
Commissioner in Sind	... For report.

By order of the Right Honorable
the Governor in Council,

(Sd.) H. YOUNG,
Chief Secretary to Government.

No. 378 of 1859.

Kurrachee, 7th December 1859.

In reply the Commissioner in Sind has the honour to attach the report by Captain Dunsterville, the acting Collector, to whom was referred the enquiry whether the petition was a *bona-fide* one expressive of the feelings of the general body of the inhabitants of Kurrachee.

(Sd.) J. JACOB,
Commissioner in Sind.

NO. 31 OF 1860.

Bombay Castle, 6th January 1860.

SIR,

With reference to the Under-Secretary Mr. Chapman's letter No. 2215, dated the 2nd November 1839, I am directed to forward for submission to the Government of India, the annexed copy of a report No. 378, dated the 7th ultimo, from the Commissioner in Sind, and under the circumstances therein represented to convey the recommendation of the Right Honourable the Governor in Council that the proposed enactment to provide for better supplying with water, the town and suburbs of Kurrachee be for the present abandoned.

I have etc.,

(Sd.) H. YOUNG,
Chief Secretary to Government.

NO. 32 OF 1860.

Bombay Castle, 6th January 1860.

Forwarded to the Commissioner in Sind with reference to his Report No. 378, dated the 7th December 1839.

By order to the Right Honourable
the Governor in Council.

(Sd.) H. YOUNG,
Chief Secretary to Government.

NO. 182 OF 1860.

True copy forwarded to Collector of Kurrachee in reference to his letter No. 2425 of the 6th December 1859.

(Sd.) J. JACOB,
Commissioner in Sind.

Hyderabad, 16th January 1860.

Water-supply for Kurrachee.

On the 13th October 1857, Mr. Frere, the Commissioner in Sind, addressed the Government of Bombay on the subject of the supply of water for Kurrachee. He pointed out that the quality of water was bad, the supply scanty and the cost of obtaining it great. From the first occupation of Kurrachee after the conquest of Sind it had been Sir Charles Napier's intention to bring in a supply from the Mulleer River and projects for doing so had been prepared by Captain now Colonel Baker of the Bengal Engineers, by Captain Hill and by Captain DeLisle. Mr. Frere pointed out how from various causes the scheme had been delayed and indefinitely postponed.

2. In May 1857, he had requested Captain DeLisle to examine the whole subject, and the report submitted by that officer was forwarded to Government. He proposed a comprehensive scheme for bringing water from the Mulleer, and for distributing it through the Camp and Town and to the shipping at Keamaree and Ghizree and on the supposition that suitable earthenware 18 inch pipes could be manufactured in Kurrachee, the expense was estimated at three and a half lacs. With iron piping the scheme was roughly estimated to cost nine lacs.

3. Mr. Frere proposed two methods of raising this sum :—

1st.—That the work should be under-taken and executed as a public work by Government, whose servants, soldiers and Departments, form a very large class of consumers and that Government should repay itself partly by the reduced cost of such supply and partly by charging for the water supplied to private individuals.

2nd.—That the Municipality of Kurrachee should be empowered to borrow the money required and to impose special rates which would provide for the extinction of the debt within a given number of years.

4. The reply to this letter, dated the 26th December 1857, was to the effect that under the financial pressure

Government could not under take the work, but desired that the Commissioner would submit a Draft Act to enable the Municipality to raise the money, adding that "the draft should provide for the management of the water-works being vested in the Municipality; for repaying with interest the sum borrowed by a rate to be raised for the purpose, the rate to be limited to a reasonable maximum; for the public supply of water being available in reservoirs conveniently situated for the rate payers; and for the sale of water delivered in houses or for gardening or manufacturing or for other purposes for which large supplies are required; the proceeds of sale being brought to account in diminution of the general rate.

5. After mature consideration a Draft Act was submitted on the 15th May 1858, by which it was proposed to enable the Municipality to borrow up to ten lacs, which sum it was roughly estimated would provide for the use of iron pipes, as it was very doubtful if earthenware pipes could be provided at a cheaper rate than iron. The Draft Act was sent to Mr. LeGryt on the 4th August 1858, but great delay occurred before it was laid before the Legislative Council, before whom it was read in amended form a second time on the 20th August 1859 and referred to a Select Committee, who were to report thereon after the 24th November.

6. A general meeting of the Commissioners and Ratepayers of Kurrachee was held on the 30th September 1859, Sir Bartle Frere in the Chair. At this meeting all classes of the community were present, and the subject was warmly discussed. A sub-committee was appointed to reconsider certain parts of the Act, and then report was submitted to Government on the 24th October 1859.

7. In the meantime a petition purporting to be from one hundred and forty four of the chief house-holders of Kurrachee, praying that the Draft Act be not passed, was presented to the supreme Government of India. Petitioners opposed the scheme 1st because it was impossible that the water-works could succeed, and 2nd because they considered the plan oppressive to them.

8. This petition was referred to the Collector of Kurrachee who reported on the 6th December that the principal householders in Kurrachee were opposed to the measure and considered that the house-tax imposed in the Bill was what they specially objected to. This report having been submitted to Government was forwarded on the 6th January to the Government of India with a recommendation that the proposed enactment be for the present abandoned.

9. The reply which has been received to this letter is annexed. In it the President in Council has expressed his desire that in carrying out this necessary measure the wishes of the community should be consulted and desired that the Commissioner should be called on to report after communication with the people of Kurrachee. The Collector of Kurrachee, on reference being made to him, stated that no definite reply could be given until the surveys on which Mr. John Brunton was then engaged were completed.

10. This survey was under taken in accordance with a vote of the Municipal Commissioners passed on 30th July 1859, when the Managing Committee was authorised to engage the services of a competent Engineer to survey the surrounding country and report on the best means for providing water for the Town of Kurrachee and a sum of rupees 5,000 (five thousand) was placed at their disposal for that purpose.

11. Mr. Brunton was instructed to commence the survey and has now submitted his report, the main features of which are as follows.

12. It is proposed to provide water by storing it in the bed of the principal feeder of the Mulleer River, at a point thirteen miles above the place where the Railway crosses it. The place selected is at Dumlote, where the river passes through a gap in the hills, and where by constructing a 'dam' 800 feet in length, a reservoir capable of containing 1,677 millions of gallons of water can be formed. This reservoir gives a head of water two hundred and forty-one feet above the top of Trinity Church and one hundred and ninety-seven feet above the bed of a small

distributing reservoir behind the Artillery Pendalls, into which the main pipes will convey the water. The distance of the distributing reservoir from Dumlote is 23 miles, and the fall is therefore eight and a half feet per mile. It is proposed to have iron piping from England eighteen inches in diameter, which are estimated to cost 10 lacs of rupees laid down and covered in. The cost of the two reservoirs will be rupees 3,38,632 and Rs. 15,500, respectively; from the distributing reservoir forty-four feet above the step of Trinity Church, branches will be laid on to supply the Camp, Town and suburbs at a cost of 1,20,000, (one lac and twenty thousand) rupees. The total estimated cost is sixteen lacs of rupees.

13. This estimate is considerably higher than Captain DeLisle's estimate for iron piping, but the difference is chiefly due to the greater length of main piping required, Captain DeLisle having proposed to bring it from a distance of sixteen miles instead of twenty three. The reasons which led Mr. Brunton to recommend the Dumlote Scheme are:—

1st. The uncertainty of the supply procurable by Captain DeLisle's plan of earthen pipes with open joints imbedded in the fine sand of the Mulleer.

2nd. The insufficient supply owing to the less fall which in Captain DeLisle's plan is only three and a half feet per mile.

3rd. The superior quality of the water at Dumlote, as ascertained by chemical analysis and the advantage of drawing it from a reservoir and not from the sandy bed of the river.

14. The cost of the two schemes may be compared as follows:—

CAPTAIN DELISLE'S ROUGH ESTIMATE.

Head of water ...	...	Rs. 7,000
16 miles of iron piping	...	„ 7,28,640
Excavation for laying pipes	...	„ 13,640
		Rs. 7,42,280

Distributing reservoir	...	Rs.	2,000
Distribution ...	...	„	97,480
		Rs.	8,48,760
Contingencies, 5 per cent.	...	„	42,380
Total Rs.	...	Rs.	8,91,140
			9 Lacs

To give a supply of 850,000 gallons per diem.

MR. BRUNTON'S SCHEME WILL COST.

Head of Water Reservoir and Valve Tower	...	Rs.	3,38,632
Twenty-three miles of iron piping	...	„	10,39,310
Distributing reservoir	...	„	15,500
Distribution ...	...	„	1,20,000
		Rs.	15,13,442
Contingencies 5 per cent.	...	„	75,672
Total	...	Rs.	15,89,114

or 16 lacs to supply 2,050,000 gallons daily.

The excess of Mr. Brunton's scheme is owing to the greater length of piping and the cost of the reservoir, the rate per mile for laying the pipes being somewhat less in Mr. Brunton's scheme than in Captain DeLisle's.

Captain DeLisle's plan provides a supply at a rate of 20 gallons a day for forty thousand souls. Mr. Brunton rightly estimates the population of Kurrachee at nearly 60,000 and he provides for its increase to 100,000. His plan will supply 20 gallons a day to one lac people, besides 50,000 gallons a day for the Railway and shipping in all 750 millions of gallons a year. At this rate of demand the Dumlote reservoir, when once filled, would, with due allowance for evaporation and infiltration, supply Kurrachee for 16 months and at the end of that time 24 feet of water would remain in the reservoir; and Mr. Brunton calculates that the drainage into the reservoir would, with a fall of rain equal to the average fall since 1852 (thus omitting the great fall of 1851), amount to upwards of 4,000 millions of gallons, on the supposition that only 50 per cent. of the rain-water is lost by absorption.

NO. 249.

Dated Fort William, the 7th February 1860.

To

H. YOUNG, ESQUIRE,
Chief Secretary, Government of Bombay.

SIR,

I am directed to acknowledge the receipt of your letter No. 31, dated the 6th ultimo, forwarding a report by the Commissioner in Sind, on the petition which was lately addressed to the Governor-General by certain inhabitants of Kurrachee, praying that the Bill to provide for better supplying with water the town and suburbs of Kurrachee may not be passed into law, and conveying the recommendation of the Right Hon'ble the Governor in Council of Bombay that, under the circumstances represented in the Commissioner's report, the proposed enactment be for the present abandoned.

2. Viewing the Bill as a local Bill for a local improvement the President in Council is quite disposed to admit that the wishes of the inhabitants should be complied with; and if, adverting to the opinion expressed by Captain Dunsterville, it can be satisfactorily ascertained that the people generally would prefer an increase in the existing Municipal taxation to the new tax proposed by the Bill, it will be worthy of consideration whether steps should not be taken to recast the Bill, in accordance with the wishes of the community.

3. The President in Council would however much regret to see the measure altogether abandoned, and he would beg the Government of Bombay to consider how a supply of good water will be provided for Kurrachee, if the present Bill, or some modification of it, be not proceeded with. The history of the measure is fully given in a letter from the late Commissioner to the Bombay Government, of October 1857, printed as an annexure to the Bill, and there seems no reason to doubt, notwithstanding the statements to the contrary in the petition now submitted against the Bill, that the existing supply of water

is really insufficient, precarious and bad in quality. This being so it appears to the President in Council to be quite reasonable and proper that measures should be taken for improving the supply, and that the expense of such measures should be defrayed by special and local taxation. But while this may properly be insisted on, and while it should be distinctly intimated to the inhabitants of Kurrachee that the Government will certainly not consent to employ public money for the purpose of providing their town with a good supply of water, which may not improbably be the ultimate object aimed at in the present opposition, it is on the other hand obviously right that the arrangement proposed for carrying out the work shall be such as will throw upon the Government a share of expense fully proportionate to the degree* in which it will partake of the benefits to be derived from an improved supply of water.

*See on this point paragraph 13 of the late Commissioner's letter above referred to.

4. If in this respect, it is made clear to the inhabitants that full justice is done, and if, as regards the share of the expense to be borne by the inhabitants, such form of taxation be adopted as is most acceptable to the general community, it will perhaps be found that the people may yet be willing that the measure should be undertaken as a local measure under the management of the Municipility.

5. The President in Council would advise therefore that the Commissioner should be instructed to take further steps in the matter; and that he should be asked to report explicitly, after such further communication with the people as he may think desirable, what arrangement, if any, he considers would be more equitable than that proposed by the present Bill or which, being equally fair to all, would be more acceptable to the Native Community.

I have, etc.,

(Sd.) W. GREY,
Secretary to Government of India.

No. 585 of 1860.

Forwarded to the Collector of Kurrachee for communication to the Municipality and inhabitants of the town of Kurrachee and suburbs. A copy of the Commissioner's letter referred to in 3rd paragaaph is also forwarded.

2. The Collector's report, on whatever arrangement may be desired by the Native community, is requested with reference to the concluding sentence of the letter from the Government of India.

(Sd.) J. D. INVERARITY,
Commissioner in Sind.

COMMISSIONER'S OFFICE,
Nagar Parkar, 20th March 1860.

NO. 742 OF 1860.

To

THE COMMISSIONER IN SIND.

SIR,

With reference to your memo. No. 585, dated 20th March 1860, enclosing a letter as per margin I have the honour to report that one of the first measures necessary to be adopted ere the people can be called on, with hope of success, to defray through the medium of local taxation, the expenses of providing Kurrachee with good water, is to ascertain whether good water is procurable, sufficient in quantity, and the lowest cost. at which the scheme can be carried out; the doubts and want of information on these points has been one of the principal causes for the opposition which has been exhibited and in order to remove them, I have availed myself of the proferred services of Mr. Brunton, the Chief Engineer of the Sind Railway, who is to examine the neighbouring country, take the levels, get the water analysed and report on the best method of effecting the object at the lowest cost.

No 249, dated 1st February 1860, from the Deputy Secretary to Government of India to the Chief Secretary to Government of Bombay on the petition of the inhabitants of Kurrachee against the Bill to provide for better supplying water to Kurrachee.

2. When this information is obtained and can be put before the public, we can then hope that their approval of a well-digested-scheme showing the expected facilities of getting a permanent supply of water, and costing a limited sum, will prompt them to unite in raising the estimated funds by local taxation.

4. All this will occupy time, and my object is now merely to report that the matter is in hand, and that some delay must occur ere I shall be in a position to reply to the references contained in the above quoted letter from the Government of India.

I have, etc.,

(Sd). J. B. DUNSTERVILLE,
Acting Collector.

COLLECTOR'S OFFICE,
Kurrachee, 2nd April 1860.

NO. 1840 OF 1860.

GENERAL DEPARTMENT,

Kurrachee, 29th September 1860.

To

THE COMMISSIONER IN SIND.

SIR,

In reply to your memorandum as per margin requesting me to report what steps I would recommend to avert the scarcity of water anticipated next year, I have the honour to submit that I had conversation with Mr. Brunton on the subject, and that arrangements are under consideration for bringing water from the Mulleer by means of large tanks which are to be filled by means of pumps at the Mulleer, and brought by rail to a spot opposite the Town, and there discharged into a couple of receivers, one for Hindus and the other for Mahomadans.

No. 811, dated 27th September 1860.

2. The matter is to be put before a Municipal Meeting to be held next week, when I have no doubt everything will be arranged. Mr. Brunton has already got a number of tanks made up and as he is most willing to render every assistance in his power, there only remains the question of how the expense is to be met.

3. There are one or two tribes, who would not under any circumstances partake of water, so brought, for instance the Cutchees, and the Punjabee Lohanas, but the Mahomadans and the bulk of the Hindu population, will make no such scruples, on the contrary they will consider it a great boon.

4. There is at present no actual scarcity of water, but its quality is bad. There is however no doubt, unless rain falls in February, that our arrangements for obtaining a daily supply by rail from the Mulleer will be the only means of getting good water next hot weather.

I have, etc.,

(Sd.) J. B. DUNSTERVILLE,

Acting Collector of Kurrachee.

COLLECTOR'S OFFICE,

Kurrachee, 29th September 1860.

L (IV) 355—72

A Bill to provide for better supplying with water the Town and suburbs of Kurrachee.

Preamble.

Whereas it is expedient that the Municipal Commissioners for the Town of Kurrachee should be empowered to construct water-works for better supplying with water the Town of Kurrachee and suburbs thereof, and that funds should be provided for the purpose; It is enacted as follows:—

Water-supply.

(1) The Commissioners appointed under Act XXVI of 1850, for putting the said Act in force in the Town and suburbs of Kurrachee, shall carry out, with as little delay as possible, such a complete system of water works, and shall construct such tanks, reservoirs and wells as shall be necessary to provide for the use of the inhabitants of the said Town and suburbs a proper supply of good and wholesome water for drinking and domestic purposes and as shall be directed or sanctioned by the Chief Commissioner in Sind, and subject to such alterations as may from time to time be ordered by him, and until such works have been completed, and all the expenses thereof defrayed, and all monies borrowed for the payment of such expenses on the security of the rates and taxes and interest thereon, have been repaid, shall set apart for the purposes above mentioned an annual sum not less than .....out of the proceeds of the rates and taxes provided by this Act and the said Act XXVI of 1850.

Mortgage of rates.

(2) It shall be lawful for the said Commissioners appointed under Act XXVI of 1850, with the sanction of the Chief Commissioner in Sind, to borrow and take up at interest, on the credit of the rates and taxes imposed and levied under the said Act and under this Act, or of a portion of them, any sums of money necessary for defraying any expenses incurred or to be incurred by them in the execution of any works under the authority of this Act for supplying water for the use of the said Town and suburbs, and for the

purpose of securing the repayments of any sums so borrowed, together with such interest as aforesaid, the Commissioner may mortgage and assign over to the person by or on behalf of whom such sums shall be advanced, the rates and taxes or the portion of them upon the credit of which such sums shall be borrowed.

Rate on house and lands.

(3) To provide for the payment of the said loan and interest, an annual rate not exceeding 2 per cent. of the value shall be imposed upon all houses, buildings and lands within the limits of the said Town and the suburbs thereof, and shall be payable by the owners thereof by half-yearly instalments. Provided that it shall be lawful for the Municipal Commissioners to fix from time to time with or by the sanction of the Chief Commissioner such annual rate not exceeding 2 per cent. on the value as may appear necessary for the due prosecution of the works and fulfilment of the provisions of the Act. Any rate so fixed shall be publicly notified before the commencement of the year in which such rate is to have effect. The said rate shall be leviable in addition to any rate or tax now leviable under the authority of Act XXVI of 1850.

After repayment of money borrowed rate not to exceed what is sufficient for the cost of maintaining the works.

(4) When the said water-works shall have been completed and all the expenses thereof defrayed, and all monies borrowed for the payment of such expenses and interest thereon shall have been repaid, the annual rate imposed by the last preceding section shall not exceed such rate as may be sufficient, in the judgment of the Chief Commissioner, to defray the annual cost of the maintenance of the said works, or such portion of the annual cost as shall not be defrayed by the income derived from the sale of water under section X

Valuation

(5) The Municipal Commissioners shall prepare a roll showing the estimated value of all houses, buildings and lands, and the amount of rate thereon to be levied; and such statement shall be open to public inspection for at least sixty days before any payment of tax under this Act can be enforced.

(6) Should any person object to the valuation placed upon his house, building or land, he may cause the matter to be referred to arbitration; in which case the Chairman of the Managing Committee of the Kurrachee Municipality shall name one arbitrator who is not a Municipal Commissioner, and the owner of the property to be assessed shall name one arbitrator on his part, and the two shall, if necessary, appoint a referee, and the finding of these arbitrators, or the majority of them, shall be final.

Objection to valuation.

(7) The valuation roll shall not be liable to alteration except at a general revision to be made, if requisite, at intervals of not less than five years; subject to which limitation it shall be in the power of a majority of the Municipal Commissioners to order such a revision whenever it may appear to them to be necessary, and any difference of opinion between the Commissioners and the owner of any assessed property on the subject of such valuation may be referred to arbitration, as above provided in section VI.

Revision of valuation roll.

(8) The Commissioners shall have full power to make all necessary contracts for the construction of the said water-works, but no Commissioner shall be personally liable for any contract so made.

Contracts by Commissioners.

(9) The management and control of the water-works when constructed shall be in the hands of the Municipal Commissioners who shall provide for the proper supply of water in public reservoirs conveniently situated for the rate payers, and any water supplied in any other manner than to the public reservoirs, shall be charged at a rate to be fixed by the Municipal Commissioners, in addition to the rate to be levied under section III. The income derived from the sale of this water shall go to pay for the annual working expenses, establishments, repairs and improvements, any balance being applied in repayment of the original loan.

Management and control of water-works.

Form of rate, etc.

(10) The provisions of sections X, XI, and XII of Act XXVI of 1850, shall be applicable to the rate leviable under this Act.

Rate may be recovered from occupier.

(11) The Commissioners may demand from the occupier for the time being of any house, building or land the sum due from the owner thereof on account of any rate leviable under this Act, and on non-payment of such sum may recover the same by distress and sale of any goods and chattels found on the premises; and in such case, the occupier may deduct from the next and following payments of his rent the amount which may be so paid, by or recovered from him, provided that no arrear of rate remaining due from the owner for more than one year, shall be so recovered from the occupier, provided always that no owner of any house shall be considered to have a right to demand or to levy any increase of rent from the occupier in consequence of the water rate imposed on him under this Act until the water shall have been admitted into the main distributary pipes within 150 yards of the house.

Construction.

(12) In the construction of this Act, words importing the singular number shall include the plural number, and words importing the plural number shall include the singular number.

Gender.

Words importing the masculine gender shall include females.

Town of Kurrachee and suburbs.

The words, "the Town of Kurrachee and the suburbs thereof" shall include the Town and Cantonment of Kurrachee, and the suburbs of Ghizree, Clifton, and Keamaree.

(Sd.) W. MARGAN,
Clerk of the Council.

Kurrachee, 29th November 1860.

To

J. D. INVERARITY, ESQUIRE,
Commissioner in Sind.

SIR,

In reference to the question of raising the capital required for construction of the water-works from Kurrachee, the plan of which was recently adopted by the Municipal Commissioners and inhabitants of Camp and town generally, I have the honour to state that I believe I can procure the capital of £ 160,000 in England, if the sum of £ 18,000 per annum required to secure 5 per cent. interest per annum and an amortisation fund to pay off the capital in 15 years can be guaranteed or secured in any way as follows, *viz*:—

(1) That Government should pay during the term of 15 years the present cost of water to its establishment stated to be in outlay £ 4,500-0-0 and in wear and tear at least £ 1,000-0 0 = ...	£ 5,500-0-0
(2) That Government should agree to pay for full supplies to bungalows in Camp and bazzar—to be recovered from tenants in such manner as the Military authorities may prefer ...	£ 1,500-0-0
(3) That the Municipality should agree to pay per annum, and recover the same by direct sale in the town or by assessment or additional duties ...	£ 5,800-0-0
(4) That the Railway Company should pay at the rate of Rs. 3 per one thousand gallons their estimated consumption of 30,000 gallons per diem.	£ 2,800-0-0

(5) That water may be sold to the Shipping at Rs. $2\frac{1}{2}$ per one thousand gallons estimated quantity 20,000 gallons per diem	£	1,900-0-0
(6) That water be sold to private bungalows and large godowns out of Camp estimated at	£	500-0-0
	£	18,000-0-0

2. This plan is the same (subject to corrections required by an error) as one which I forwarded for the consideration of the Municipal Commission. I was unfortunately prevented from being present at the meeting of the Commission for considering the question. But understanding that my proposition was not acted on, I submit it for your consideration.

3. I may state briefly that I should ask for the guarrantee of the 1st three items and that the lender would take the risk of the remainder.

I have, etc.,

(Sd.) NEVILLE WARREN.

No. 2506 of 1860.

PUBLIC WORKS DEPARTMENT.

Forwarded to the Collector of Kurrachee for report in connection with the subject of a water-supply for the Town and Camp of Kurrachee now under the consideration of the Municipal Commission.

(Sd.) J. D. INVERARITY,
Commissioner in Sind.

COMMISSIONER'S OFFICE,
Kurrachee, 30th November 1860.

NO. 2218 OF 1860.

GENERAL DEPARTMENT,

Dated 8th December 1860.

To

THE COMMISSIONER IN SIND.

SIR,

With reference to the letter No. 249 dated 7th February 1860 from the Secretary to Government of India to the Chief Secretary to Government of Bombay, received under endorsement as per margin, directing that further steps should be taken in the matter of providing for the station of Kurrachee a supply of good water, I have the honour to report that it was considered advisable, in the first instance, to prepare a scheme by which a supply of water proved to be wholesome, should be obtained, and to obtain an estimate of the probable cost, in order that the same might be put fully before the public.

No. 408, dated 20th February 1860, from the Chief Secretary to Government of Bombay.

No. 585, dated 20th March 1860, from the Commissioner in Sind to the Collector of Kurrachee.

2. The previous schemes had been proposed by Military Engineers, more with a view to supply the barracks, and the military portion of the station, with water than with a general object; and as the increase of the town and shipping had become very great during the last three years, it became necessary to consider them as the principal objects in the project.

3. The Kurrachee Municipality had voted a sum of five thousand rupees for employing the services of an Engineer for the purpose of surveying the surrounding country and reporting on the best method of obtaining a supply of good water. The services of Mr. John Brunton, Chief Resident Engineer to the Sind Railway, were accordingly engaged, and after several months of enquiry and observation he had drawn up and submitted a scheme for fulfilling the object.

4. A printed copy of his report is herewith appended. The original is accompanied by eight elaborate plans, sections and drawings illustrative of his report.

5. Being thus provided with a project which could be laid before the public, and be easily understood by them, a general meeting of the Municipal Commissioners, rate payers and such as chose to attend, was held on the 9th November, at which it was resolved that Mr. Brunton's report and scheme be adopted, and that the Municipality should be entrusted with the duty of carrying out the project, and of devising the means of raising the necessary Rs. 16,00,000 capital sixteen lacs of rupees.

6. On the 23rd of November a general meeting of the Municipal Commissioners was held to consider the subject.

7. At this meeting such methods of raising the money as were likely to prove successful were fully discussed, and among them was one submitted by Mr. Neville Warren, the Agent of the Sind Railway, which I notice particularly here, as he has since addressed you on the subject; but which we can not entertain, as he stipulates for a guarantee from Government that they shall pay for a term of 15 years the present cost of water to its establishment or £ 5,500 per annum, including wear and tear, and also be responsible for £ 1,500 per annum for the supply of water to bungalows in Camp and bazzar, to be recovered from tenants in such manner as the authorities may choose, neither of which propositions have the Municipality any authority or power to listen to.

8. The Commissioners finally requested me to address a letter for the purpose of being submitted to Government, soliciting information if Government would give assistance by advancing the capital necessary to carry out Mr. Brunton's scheme, sixteen lacs of rupees, and if Government would consider it expedient to do so, that the Municipality would undertake to repay the same at the rate of one lac of rupees per annum, commencing from the date the water is distributed in Kurrachee and would also pay interest on the loan.

9. The lac of rupees is to be derived from the following sources. Ten thousand rupees per annum are to be set aside from the present income of the Municipality, a portion which it can very well spare far so important an object and twenty thousand rupees per annum are to be raised by increasing the present rates of taxation. The balance seventy thousand will, it is believed, be more than fully raised by the sale of the water. A mercantile gentleman who has been resident at Kurrachee ever since its establishment as a port, estimated that the shipping alone would pay Rs. 33,000 for water per annum if it were sold at a low rate of 4 annas per hogshead.

10. The Commissioners also desired me to ask, in the event of Government declining to advance the capital on loan, whether Government would guarrantee five per cent. on the capital, if borrowed from a private Company.

11. Without some guarantee of this kind, no Company would lend money except perhaps at an exhorbitant rate of interest to a Municipal Association who are dependent on their continued unanimity and good wishes for the public good, for their very existence.

12. But it is earnestly hoped that Government will listen favourably to the request of the Municipality by advancing the money on loan. In a few years it will be repaid with interest, and will give a manifold return by various other channels, such as the increased prosperity of the port and the station, and the health of the troops.

I have, etc.,

(Sd.) J. B. DUNSTERVILLE,
Acting Collector of Kurrachee,
and President, Kurrachee Municipality.

COLLECTOR'S OFFICE,
Camp Kotri, 8th December 1860.

No. 2583 OF 1860.

Camp Gopang, 11th December 1860.

Letter, dated 29th November 1860, from Mr. Neville Warren; endorsement by Commissioner in Sind No. 2506, dated 20th item with printed Report, dated 23rd October 1860 from Mr. Brunton, Chief Engineer, Sind Railways.

With reference to correspondence as per margin (to be returned) the Collector of Kurrachee is requested to forward a copy of the proceedings of the meeting alluded to in the 7th para. of his letter No. 2218 of the 8th instant.

2. Mention is made, in the same paragraph of a scheme for raising funds prepared by Mr. Neville Warren. It is not quite clear upon what grounds the Municipal Commissioners were debarred from entertaining this. At least should it have been stated whether, in the event of Government agreeing to the two first guarrantees required, the third guarantee would have been accepted by the Municipality.

3. The rate of interest and from what date accruing are items of information necessary to be shown in connection with the loan contemplated in para. 8.

4. To estimate carefully the value of the opinion noted in para. 9 as to the probable receipts from the Shipping, the name of the authority should be given. It is requested that the rate of water entered in the same para. per hogshead, be further shown in gallons.

(Sd.) J. D. INVERARITY,
Commissioner in Sind.

Camp Gopang,
11th December 1860.

No. 5 of 1861.

PUBLIC WORKS DEPARTMENT,

Dated 6th February 1861.

To

THE COMMISSIONER IN SIND.

SIR,

With reference to your Memorandum as per margin, on my Report for raising the means wherewith Mr. Brunton's scheme for providing the station of Kurrachee with good water might be carried out, I have the honour to enclose a copy of the proceedings of the Municipality held on the 23rd November last, therein called for.

No. 2583, dated 11th December 1860.

2. I refrained from earlier answering the questions contained in the body of your Memo., because at the time of its receipt, I was in the district, and being a single member only of a large Association, I was not in a position to answer questions of such importance without making a reference to a general meeting which I hoped to assemble at a future time; however as I understood that you wish to lay the proposition before His Excellency the Governor, now daily expected here, I therefore do myself the honour to report what I believe to be the general feeling of the Commissioners towards Mr. Neville Warren's proposal to raise the money from a private company, which is that a Private Company would undoubtedly demand repayment of the loan by fixed instalments commencing immediately after the advance has been made. This it would be quite out of our power to do, for the water-works would take about 2½ or 3 years to execute; and until they are ready, and returns from the sale of water are received, our Municipal body could do no more than pay the interest on the loan; but the aid of Government is solicited in the hope that a benevolent Government who possesses a great interest in the prosperity of this rising place, would, if disposed to give such aid, consent at the same time to post-

pone the demand for repayment of the capital, until such time as the works became complete and the water became available. It is also hoped that Government would afford the required assistance at a more reasonable rate of interest than what we could obtain from a private company. Moreover in entering into any arrangement with a private company, the law expenses connected with the documents to be drawn up would be heavy, and the stipulations would be very stringent, and I very much doubt if any members of our Association could be prevailed on to sign them owing to the apprehension of involving themselves in personal risk and responsibility.

3. It was under these circumstances I was requested to ask if Government would give their aid and to what extent, as it appeared to the members generally that the only source from which the capital could be obtained with satisfaction to themselves would be from Government.

4. With regard to the probable receipts from the shipping, Mr. Brunton has in his report calculated the requirements under this head at 20,000 gallons per diem. The mercantile gentleman alluded to in the 9th para. of my report is Mr. McIver, who stated that a water cask contained 56 gallons and that if each cask were filled at the rate of 4 annas each, the result would be—

56) 20,000 (357 casks per diem.
168
320
280
400
392
8

at 4 annas a cask, would be nearly 90 rupees a day, or Rs. 32,950 per annum.

5. Mr. Brunton's estimate includes, I believe, the native craft, and it must be remembered that it bears reference to a period of at least $2\frac{1}{2}$ years hence, on the works becoming complete, when the shipping will, in all probability, be greatly

increased. The extreme difficulty of getting water for shipping and its indifferent quality when obtained, is the chief drawback to our port. It is intended in Mr. Brunton's scheme to convey water to the extremity of the Keamaree Pier which is but a few yards from the ships at anchor, and I have no doubt that Commanders of vessels would gladly give 8 annas per cask in lieu of 4, so that supposing the probable demand for water for ships be over estimated, the amount mentioned by me is certain, nevertheless, to be realized at the enhanced rate.

I have etc.,

(Sd.) J. B. DUNSTERVILLE.
Acting Collector of Kurrachee.

COLLECTOR'S OFFICE,

Kurrachee, 6th February 1861.

Kurrachee, February 18th, 1861.

To

J. D. INVERARITY, ESQR.,
COMMISSIONER IN SIND.

MY DEAR SIR,

With reference to Mr. Brunton's estimate for cost of the proposed water-works with iron pipes for the main conduct, I have asked for a comparative estimate of the cost of that item as against a main conduit constructed of stone and chunam. It appears thus per mile—

316 tons iron pipe @ Rs. 100 per ton ...	Rs.	31,600
„ „ haulage @ Rs. 10 „ ...	„	3,160
147 cwt lead @ Rs. 14 per cwt. ...	„	2,058
587 joints-humps labor @ Rs. 4 per joint.	„	2,348
95040 c.ft. earth-work @ Re. 1 per 100 c.ft.	„	950
Total...	Rs.	40,116

Per mile—

142,560 c.ft masonry @ Rs. 40 per c.ft.	Rs.	57,024
36,960 „ plastering @ Rs. 10 per 100 c.ft.	„	3,696
285,000 „ earth-work @ Re. 1 per 100 c.ft.	„	2,850
Total...	Rs.	63,570

I believe a tender has been privately offered to deliver the iron at about $\frac{3}{4}$ths the above and indeed Mr. Brunton's final estimate is below that sum, so that the comparative difference is much greater than is shown above.

The only other remark to make on the above items is that for a stone channel the inclination must be regular and more earth-works are therefore required. Whereas an iron

pipe is laid down in the earth without reference to the variations of level, the general inclination being in the right direction.

Stone drain surface with pipes.

There are two river beds to cross. If a stone channel had not a regular inclination it would blow its head off at the first rise. The stone would have to be brought a considerable distance, and the most costly thing in Sind now is haulage.

Believe me,

My Dear Sir,

Yours very sincerely,

(Sd.) J. NEVILLE WARREN.

Report by Mr. John Brunton, M.I.C.E., on the Scheme for providing Kurrachee with water-supply.

Kurrachee, October 23rd, 1860.

To

THE PRESIDENT OF THE COMMITTEE
OF THE MUNICIPALITY OF KURRACHEE.

SIR,

In compliance with the instructions contained in your letter No. 610 of 1860, dated 5th April, I have now the honor of submitting details of a scheme which, in my opinion, will achieve the end proposed, namely, to supply the rising station of Kurrachee with an abundance of good and wholesome water. This Report is accompanied by Plans, Sections, and Drawings as follows :—

Drawing No. 1—Map of District.
" " 2—Plans (contoured) of Upper Reservoir.
" " 3—General Section on line of Pipes.
" " 4—Cross Section of Bund and Weir.
" " 5—Distributing Reservoir.
" " 6—Valve Tower.
" " 7—Longitudinal Section on line of Weir.
" " 8—Plan of Kurrachee, showing the mode of distribution proposed.

In the first place, I made a careful examination of the surrounding country, with a view to ascertain the sources from which a supply of water could be derived, and made myself fully conversant with the several projects, which, from time to time, have been brought forward for this purpose.

These appear to be four in number :—

1st—Captain Baker's,
2nd—Captain Hill's,
3rd—The Cantonment Water Company's, and
4th—Captain DeLisle's.

L (IV) 355—74

Full details of each of these projects are given in a Report made by a Committee, named by the late Commissioner in Sind, and dated 1st October 1857. This Report was printed and circulated, and it would, therefore, be superfluous for me to enter upon a recapitulation.

To that Report, I beg to refer you, and would observe that, with the exception of No. 3 in the list, each project has taken the Mulleer River for its source of supply, and in my opinion, judiciously, for the choice evidently lies between the Lyaree and the Mulleer. From the former, the water, with which Kurrachee is at present supplied, is drawn. Its quantity is notoriously inadequate to supply the increasing demands upon it, and it would be manifestly impolitic to interfere in any way with the existing supply.

To the valley of the Mulleer, then, as in projects 1, 2 and 4, we must look for obtaining the end in view.

On a careful examination of the details of the most recent of these projects, *viz.*, that by Captain DeLisle, I considered that, although he had obtained a greater fall per mile for his pipes than in either previous scheme, it was still too little. The mode of collecting the water from the River, also, is open to serious objections,—the probabilities being that, from the fine character of the sand in the river-bed, the side drains or underground collecting pipes would be choked in a very short time, and to clear them would involve an outlay equal to the first cost of laying them down.

With these views, I was led to go further up the River, and endeavoured to find some point where the natural formation of the river-banks would afford facilities for constructing a reservoir for storing the rain water—convinced that, in a country where the average fall of rain is so small as 5 or 6 inches, and that falling sometimes within 24 hours, and passing off the surface very rapidly, it would not be prudent to trust entirely to springs for the supply required.

Other reasons, likewise, led me to ascend the valley. I found that the Mulleer, for 20 miles above Jemadar-ka-Landi,

receives several tributory streams,—the Sookun, Dumb, Bazaar, Dumlote, Jerinda, Mole, etc.,—as will be seen by an inspection of the Map, Drawing No. 1 accompanying this Report.

Upon an examination of these valleys, I found that, in the Dumb and Bazaar Rivers, there were very distinct traces of salts left upon the surface from the exhalations at the edges of the shallow pools. At Dumlote, where the water is running upon rock, no such traces were visible, and I found the water there of peculiar sweetness and purity, judging from the taste of it.

I collected samples of the waters of these various streams and through you, Sir, submitted them for analysis at the Government Laboratory in Bombay. Six bottles of each were sent and lettered as follows :—

6	bottles	marked	A	from	Gorban.
6	„	„	B	„	Jerinda.
6	„	„	C	„	Dumlote.
6	„	„	D	„	Dumb.
6	„	„	E	„	Bazaar.
6	„	„	F	„	Mulleer, at the Railway Crossing near Landi.

At Dumlote, the river is contracted in its breadth by the high rocky banks approaching each other, leaving a gap, or pass, of about 800 feet broad, through which it flows,—partly upon the surface of the rock, and partly through the sandy bed accumulated upon the rocky sub-stratum.

I caused a number of trial borings to be made, and an accurate Section to be taken across the river at this point; for, while at places higher up the River, there are points where it would be an easy matter, from the natural conformation of the ground, to construct reservoirs, yet this being the lowest down the river,—the nearest to Kurrachee,—and possessing great natural advantages, I at once selected it as the point from which the water for Kurrachee could be most advantageously drawn.

I ascertained that the height of the river-bed at the point (which I shall in future call Dumlote, for facility of reference), was 241·12 feet above the top-step of Trinity Church, Kurrachee, which is the Railway datum.

I found that a line of country for laying down the pipes presented itself, nearly straight and of comparative uniform declivity, which would enable me to deliver the water from the main conduit pipe into a distributing reservoir, shown in the Plan No. 5, at a height of 44 feet above the datum point, and sufficiently high to afford a high service to all parts of Kurrachee, with the exception of the Artillery Pendalls.

Having thus given you a general view of the project, I will now proceed to its details.

Quantity of water required.

There has been no census of the town of Kurrachee for several years, but there is good evidence from which to infer that, at the present moment, the number of inhabitants cannot be under 60,000, including the town, suburbs and camp, and this number is daily increasing.

It would be short-sighted policy to lay out a scheme for the water-supply of a rising place like this without making ample allowance for a considerable increase in the population. I have, therefore, taken 1,00,000 as the number for which a full supply should be arranged, exclusive of the Railway and the Shipping.

According to the evidence given before the Parliamentary Commissioners on the subject some time ago, it appears that the average delivery of all the Water Companies in England and Scotland was then 24 gallons per head per day.

Of late years, a much larger quantity, even up to 140 gallons per head, had been proposed in some instances. I feel, therefore, it would not be prudent to estimate the requirements of Kurrachee at a lower rate than 20 gallons per head per day, exclusive of all the existing sources of supply, which are notoriously scanty and limited, as well as of inferior quality.

The quantity of water, then, required is as follows :—

1,00,000 inhabitants at 20 imperial gallons per head per diem ...	...	2,000,000
Railway requirements, say	...	30,000
Shipping estimated at ...	...	20,000
Gallons per day	...	2,050,000
Gallons per annum	...	748,250,000

The fall of rain in Sind is so uncertain,—in some years there being next to none, and at the best only registering 6 to 11 inches,—that it becomes an act of only common prudence to store as large a quantity as possible to meet this contingency, when it can be done at a moderate outlay. Two, and even three years have been known to pass in Kurrachee without any appreciable quantity of rain, and who would not contemplate with horror the possibility of a large community, such as Kurrachee is likely to become, accustomed to the free use of an abundant supply, being suddenly deprived of it, or reduced to a minimum allowance? In the course of this Report, I trust to be able to show that such a fearful contingency may be provided against, and that sixteen months' full supply, according to the above calculations, can be stored for use.

Quantity of water.

The present supply of Kurrachee is drawn from tanks, and public and private wells. The tanks are wholly dependent upon the extent of the rainfall, and annually, towards the end of the dry season, become empty; while the water itself, being small in volume and stagnant, becomes offensive and unwholesome long before it is deficient in quantity.

These tanks are excavated in clay strata, more or less impregnated with salts of various kinds, which are dissolved by the water, and which render it to such extent unfit for drinking purposes.

The water obtained from the wells varies much in quality. It appears that the waters from the Lyaree valley, in their underground course, do not follow that taken by its floods, but filtrate through a gravel bed lying upon the clay sub-stratum, indicated by the blue coloring on the map No. 8, and that the wells, sunk in the district thus shown, supply water of a purity just in proportion to their approximation to the centre line of this underground course. This fact is well known to the older inhabitants.

When the establishment of the Cantonment Water Company's well was in agitation, samples of the water from the various wells in Kurrachee were sent down to the Government Laboratory for analysis, the results of which are given in Table Appendix C.

On reference to the opinions of the best authority in England upon the subject, I find Doctor Christison expressing himself as follows:—

> "The waters which are obtained from springs, arising from trap rocks, sandstone, transition and primitive rocks, are the purest; those from alluvial strata, from beds of the coal formation, with the exception of sandstone, and from limestone of all kinds, are commonly the least pure. All, however, contain a proportion of certain salts, the most general of which are the muriates, sulphates and carbonates of lime, soda and magnesia. The lowest proportion I have yet encountered was a 22,000th. part of the water. If it exceed a 2,000th., the water becomes scarcely fit for domestic use, and belongs to the class of mineral waters."

It appears from this, that the present sample, No. 21 in the above table, contains within a fraction as much of these salts as is pronounced sufficient to render it unfit for domestic use by Doctor Christison.

No. 22 is the sample from the Commissariat well, whence is drawn the supply for the Troops in Garrison here, and considered about the best in Kurrachee: it contains more than twice the possible quantity.

The supply from this well is strictly reserved by the Commissariat, and the general public are supplied from other, and less pure, sources.

The Railway Company have purchased the Cantonment Water Company's well, and have lately erected a Steam Engine, which pumps water for the supply of their workshops at the Ghizree junction. I have caused a very careful gauging of this well to be made, and I find that its capability of supply, though 60 feet in diameter, is only 20,000 gallons per day.

As previously stated, I forwarded for analysis samples of water taken from various points in the Mulleer Valley, the results of which are given in Appendix B.

The samples were taken from pits sunk in the bed of the stream, generally at 3 different points, the two sides and centre,-two bottles being taken from each pit. This accounts for the discrepancies which appear to have arisen and confused Doctor Haines in his analysis; and I regret the extra trouble it appears to have engendered. I confess, I was not prepared for there being so much difference as is mentioned by Doctor Haines in the samples taken within a few yards of each other. Dr. Haines sums up his remarks thus:—

> "In fact, the waters are all of good quality. D appears to be the hardest, and A, C and F the softest. The merest traces, only, of organic matter were found in any, and that, in all probability, derived from the corks of the bottles.
>
> I should say that C on the whole is the purest."

This may be considered very satisfactory as the samples marked C are from Dumlote, the proposed site of the reservoir.

The water, proposed to be stored in the reservoir at Dumlote, would be, to a large extent, rain water collected from surface drainage, and the gathering grounds being uninhabited, uncultivated, and free from any morasses, which might tend to charge it with animal or vegetable impurities, it may safely be inferred that the water thus collected would be of unexceptionable quality.

It is usual, in water-works of this class, to make arrangements for filtering the water; and there would be no difficulty in doing so at Dumlote, by the erection of a filtering tower of sufficient dimensions. But it will be a very expensive portion of the works, and as it is an important point to reduce the first outlay as much as possible, it is a question whether it might not be dispensed with for the present, and, if at any future times found necessary, filter—beds may be formed in connection with the lower or distributing reservoir, without interfering with the water-supply during their construction. So convinced am I that the water collected and stored in the way proposed will be found sufficiently pure, and for some years that the consumption will not reach the capabilities of the reservoir, that I consider it desirable to postpone the filtration, and therefore have not included the cost of filter— beds in my estimate.

Capabilities of the Upper Muller District for affording the required supply.

This is a question of paramount importance, and I have, therefore, given it very careful consideration. The supply is dependent to a great extent upon the rain fall. I have obtained from the Government Meteorological Observer the following Table of the rainfall taken at the Observatory of the European Hospital in Kurrachee, from the 1st September 1855, to the present date.

Rain measured at the Observatory at the European Hospital from the 1st September 1855, to the 31st August 1860.

Year.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	Grand total.	
1855 ...	0·15	0·00	0·00	0·00	...	...	...	...	...	...	...	...	0·15	5·32 average.
1856 ...	0·00	0·00	0·00	0·00	1·62	0·59	0·00	0·00	0·00	0·04	0·11	0·25	2·61	
1857 ...	0·38	0·00	0·00	0·00	0·41	1·13	0·00	0·00	0·00	0·00	0·29	4·34	6·55	
1858 ...	0·51	0·00	0·00	0·27	0·00	0 00	0·00	0·00	0·00	0·03	4·94	0·09	5·90	
1859 ...	1·08	0·00	0·02	0·20	0·00	0·00	0·02	0·00	0·00	0·00	4·90	0·00	6·22	
1860 ...	...	...	...	...	1·09	0·00	0·00	0·00	1·22	0·00	0·00	0·52	2·83	

(Signed). C. RICHTERN,
Observer.

Kurrachee, 31st August 1860.

Dr. Grierson has also furnished me with the following Tabular Statement, which goes back to the year 1851, when a very unusual amount of rain fell; so unusual, that I shall not include it in calculating the averages:—

AMOUNT OF RAIN FROM THE YEAR 1851.

Kurrachee, 14th September 1860.

Year.	Amount.		Remarks.
	Inches.	Cents.	
1851	25	99	
1852	11	13	
1853	3	38	
1854	2	90	
1855	13	1	
1856	1	79	
1857	11	34	
1858	5	32	
1859	5	61	
1860	2	9	Incomplete.

From the 1st table, it appears that the average fall in Kurrachee for the four years, 1856 to 1859, inclusive, was 5·32 inches, and by the 2nd table, that the average of the 8 years, 1852 to 1859, inclusive, was 6·71. There is no doubt that a greater quantity than this falls on the range of the hilly country drained by the Rivers, Mole, Mulleer, Jerinda, &c., and passes Dumlote, and while, in some years, no rain falls in Kurrachee, it would be an incident of very rare occurrence, if such were to be the case on the hills, from which we propose to draw our supply.

To render the calculations safe, I propose to take 4 inches as the average rain fall to be depended on.

The area of gathering grounds above Dumlote is at least 200 square miles.

L (IV) 355—75

The question, then, arises as to what will be the probable available proportion of rain falling upon this area, and here I cannot do better than quote a passage from Mr. Hughes' valuable little treatise upon the water-supply of towns :—

" It will be seen in the following table, chiefly taken from Mr. Beardmore's valuable work, which has been so often alluded to, how variable are the proportions which obtain between the whole rain-fall and the available quantity which can be collected in the storage reservoirs.

Names of Drainage Area.	Registered rain-fall per annum.	Depth of rain per annum flowing off the surface, as ascertained by gauging of the streams.	Proportion, or percentage, of rain-fall which flows off the surface.
Ban Reservoirs (Moorland) ...	72·0	48·0	66·0
Greenock (flatmoor)	60 0	41·0	68·0
Bute (low country)	45·4	23·9	53·0
Glencourse (Pentland Hills) ...	37·0	22·3	60·0
Belmont (Moorland) 1843 ...	63·4	50·7	80·0
" 1844 ...	50·0	33·3	67·0
" 1845 ...	55·0	41·2	75·0
" 1846 ...	49·8	33·2	67·0
Rivington Pike	55·5	24 25	44·0
" from Stephenson's ...	.....	.....	.....
Report (1847 and 1848) ...	63·6	40·0	63·0
Turton and Entwistle 1836 ...	46·2	41 0	89·0
" " 1837 ...	48 2	39·0	81·0
Ashton	40·0	15·5	39·0
Drainage areas on South side of Longridge fell near Preston, May, 1852, to April 1853 ...	54·0	15·5 18·0 22 0	29 0 33·0 43·0
Bateman's evidence on the drainage area of Longendale—			
First half of 1845 very day ..	21·2	13·5	64·0
Second half of 1846	38·6	27·25	71·0
First half of 1846	22·5	17·5	78·0
October, November and December, 1846	10 2	8·67	85·0

The proportion appears to range from one-third to four-fifths of the whole rain-fall.

The preceding table represents the depths of rain-falling per annum on certain drainage areas, and in the next column the depth of rain which will produce the actual quantity flowing in the streams and rivulets of the district. The difference

between the two depths, in each case, is composed of the following:—

1st.—The loss by evaporation and the moisture entering into vegetable life.

2nd.—The amount absorbed by the soil sinking into the ground, and not afterwards being given out by springs within the drainage area.

The third column of the table shows the percentage of the whole rain-fall which can be collected.

Mr. Hawkesly is said to have made experiments on an area of 100 square miles, which showed that 43 per cent. of the whole rainfall could be collected into reservoirs.

Mr. Stirrat found, as the result of three years' experiments at Paisley, that 67 per cent. of the whole rain-fall could be collected and delivered in the town.

Some very accurate experiments were made in America, to ascertain the proportion between the rain-fall, and the depth which could be collected, to supply the reservoirs of the Chenango Canal. These experiments were made in Madison County, New York.

One experiment was made on the water shed of Eaton Brook, an area of 6,800 acres, with a steep slope and a compact soil, underlaid by hard greywacke rock, elevated 1,350 feet above the sea. The quantity of water flowing off this drainage area was accurately gauged every day for a period of two years, and was found to amount to 66 per cent. of the whole rain-fall.

Another experiment was made on the water shed of Medison Brook, an area of 6,000 acres, 1,200 feet above the sea. The slopes here are not so steep as in Eaton Brook Valley, and the soil is gravel, resting on greywacke. It was found in this case, that 50 per cent. of the whole rain-fall was carried off by the streams.

Experiments were made at two stations on the drainage ground of the Albany Works. At the first station, having a water shed of 2,600 acres, it was found that from May till October, inclusive, only 41½ per cent. of the rain-fall was

carried off by the streams, but in the other six months, from November till April, inclusive, 77·6 per cent. was so carried off. This was in the year 1850; but in the very next year, 1851, the streams carried off, between May and October, inclusive, no less than 82·6 per cent."

There is nothing in the geological structure of the country drained by the Mulleer, which would lead me to anticipate any appreciable loss beyond that attributable to evaporation, No. 1 in the above quotation. The quantity of water absorbed by the soil would, I think, be again given out by the springs in this case, for I find that the river-bed at Dumlote is never known to be dry, and, from the experiment I made by sinking a well in the sand composing it, I should judge that the quantity constantly filtering through this sand and passing down the river-bed is very considerable, and, if the dam be constructed would all be available.

I will take, however, 50 per cent., only, of the average recorded rain-fall upon the drainage area, as the available quantity, which gives 4,355,999,943 gallons.

Storage capacity of the Dumlote Reservoir.

I caused a contour suvery to be made immediately after I had selected this as the best locality for impounding the water.

The result of the survey is shewn in Drawing No. 2. The vertical distance of the contour lines is five feet. From the data thus afforded, I have constructed the following table of the contents of a reservoir formed at this point.

Table showing the contents at different water-levels of the Dumlote Reservoir :—

Depth of Reservoir.	Area in acres and square yards.		Cubic feet.	Gallons.
5	2	77	146,361	914,758
10	19	3,164	1,846,953	11,543,456
15	59	7	9,646,641	60,291,506
20	154	3,111	31,271,520	195,447,000
25	293	505	78,437,875	490,236,719
30	420	30	155,269,280	970,433,000
35	624	3,294	268,307,480	1,676,921,750

According, then to the height of the impounding dam, is the capacity of the reservoir.

There is another element which here comes into the calculation, *viz.*, the extent of loss which must be provided for, occasioned by evaporation and soakage, or infiltration. On the first of these sources of loss, I would remark that authorities differ very greatly as to its extent.

I find Mr. Hawkesley states that it varies from 9 to 6 inches per annum.

Mr. Stirrat denies that any loss accrues under this head, while the results of the Greenwhich Observatory experiments, being founded upon the amount of evaporation from a small and shallow surface, are, therefore, considerably beyond what could possibly take place in a large and deep reservoir. The coolness of the water also would cause a condensation of the dews to an extent which would materially assist to make up the loss under this head.

I find that, for the Bombay Water Works at Vehar, Mr. Conybeare has calculated 6 feet 2 inches as the depth to be allowed in the reservoir for evaporation, taking the Bombay Observatory experiments as his datum.

We have the following conflicting opinions:—

Mr. Hawkesley ...	16	inches per annum.
Mr. Stirrat... ...	0	„
Greenwhich Observatory.	60	„
Bombay do. ...	94·90	„

I have calculated for a loss of seven feet by evaporation.

Under the second head of loss, *viz.*, that by soakage or infiltration, I would observe that, if the impounding dam be properly constructed, so as to be water-tight, there can be very little loss in this way. Some loss there doubtless will be, and in the absence of any rules for calculating it, and with a conviction that the strata are of a fairly retentive character, I estimate the loss to be 10,000,000 gallons.

We have then the following results :—

Quantity required per annum for the supply of 20 gallons per head to 1,00,000 inhabitants, &c ...	748,250,000 gallons.
Loss by evaporation, 7 feet depth upon average area of reservoir	476,437,500 „
Loss by infiltration estimated.	10,000,000 „
Total requirements per annum.	1,234,687,500 gallons.

The reservoir if impounded to the depth of 32 feet, (see table), would contain this quantity, but as it would never be advisable to drain it, I would recommend that the 35 feet level be taken. This would store a supply sufficient for 16 months' full consumption, without reducing the depth of the water in the reservoir to a less point than 24 feet. This is an important consideration, as small bodies of water are affected by the heat, and become rapidly unwholesome.

I would further suggest that such portion of the reservoir, where the surface of the ground is only slightly shelving, be excavated, and the material cast up beyond the highest contour line. This could be done at a small cost, and while increasing its capacity, very greatly improve the sectional form of the reservoir.

Mode of constructing the dam.

The point which I have selected as the best for constructing the dam is shewn upon Drawing No. 2.

At this place, the River-bed is composed of coarse sand and gravel, lying upon a rocky sub-stratum, at an average depth of about 12 feet from the present surface.

I propose to construct the dam of earth-work, footed upon masses of concrete, and paved or pitched with stone. A section is shown in Drawing No. 4.

The material to be obtained from excavations made within the reservoir, and carefully selected. An abundance of clay or marl may be thus obtained to form the body of the dam, which must be brought up in layers and well watered and punned, so as to form a water-tight barrier.

The construction of the dam is the only difficult engineering work in the whole project. From the peculiar nature of the material, it will be necessary to have a supply of good and appropriate pumps from England, by which the difficulties may be met.

The slope towards the reservoir to be 2 in 1, and carefully pitched with stone,—an abundance of which can be obtained near the spot.

By the calculations of the drainage area in folio 14 of this Report, it appears that, even on occasions of the smallest rainfall, a very large surplus of water would exist, and it becomes necessary not only to provide for its escape, but these provisions must contemplate the contingency of an extraordinary season, when with double the average quantity of rain falling, heavy floods would result. I propose, therefore, to make the whole length of the dam, a weir, and to construct the slope of the lower side of the dam as shewn in Drawing No. 4. This weir facing would be footed upon the rock.

In addition to this, I also propose to build another waste weir at the point A on Drawing No. 2, where the nature of the ground is such that it would become an easy matter to construct it, and form a channel, by which, at times of extra floods, a considerable portion of the water would be carried back into the river without passing over the Dumlote dam.

I have ascertained that the sectional water area at the highest floods in the Dumlote pass is 8,142 square feet. The length of the Dumlote dam or weir will be 1,200 feet, and at the point A., above referred to, I propose to make a waste weir 500 feet in length, total 1,700 feet. Thus, there would never be more than 2 feet depth of water over either of the waste weirs, even at the greatest floods.

Mode of drawing off the supply.

At a convenient point near the foot of the inner slop of the dam, I propose to erect a circular tower of masonry, having a series of sluice valves, arranged in a spiral course round it at intervals of 5 feet, measured perpendicularly, to admit of the water being drawn off at a depth varying with that of the water in the reservoir. These valves to be protected externally by strong copper network or grating, to prevent any bulky substance from entering the Tower.

At the base of this Tower, a strong cast iron valve-box to be built, having a circular valve, of the best construction, by which the supply of water into the main can be accurately adjusted from the chamber at the top of the Tower.

From this valve-box, the main conduit pipe would be laid, not through the body or base of the dam, but in a trench cut into the solid ground at the north end of it.

The communication with the chamber at the top of the Inlet Tower would be maintained by a light bridge, or gangway, from the high ground at the north end of the dam, as shown in Drawing No. 6.

It will be seen that, by closing the external valves of this Tower, access can at once be had to the main valve for purposes of repair, or removal of any obstruction.

Main Conduit Pipe.

This I propose to be of cast iron socket pipes, and its size has been one of the most important problems I have had to solve. To give the detailed calculations by which I have arrived at the following conclusions, would only swell this report to an inconvenient length; suffice it to say, that I applied to the question the formulæ of the highest authorities upon the subject, based on the following data :—

(1) That there is a total fall between the main reservoir at Dumlote and the distributing reservoir of 213·98 feet.

(2) That the distance is 23 miles.

(3) That the average inclination is 9·33 feet per mile.

(4) That the supply required in the 24 hours is 2,050,000 gallons.

Upon the above conditions, I obtain—

by Hawksley's formula	...	17·58 inches
„ DeProny's „	...	21·25 „
„ Blackwell's „	...	18·00 „

as the requisite diameter of the pipe.

The fall of the pipe is so regular, and its course so nearly straight, that I consider 18 inches diameter would be sufficient, as it would deliver 2,033,544 gallons in the 24 hours.

Should the requirements of Kurrachee, at any future period, exceed this quantity, an additional pipe would have to be laid, unless it should appear advisable to the Municipality to lay a 20 inches main in the first instance, at an additional outlay of Rs. 1,60,000. A pipe of this size would deliver 25,00,000 gallons per day, or a full allowance for 25,000 additional inhabitants.

I proposes to lay this main underground throughout its length (see Section Drawing No. 3), passing under the beds of the Bazaar and Dumb Rivers, and protected there by filling the trench with concrete.

Distributing reservoir.

The quantity of water consumed during the 12 hours of the day being much in excess of that required during the remainder of the 24 hours, it becomes necessary to construct a reservoir near the town, which shall act as a compensation pond, and from which the distribution can be regulated.

I have selected a spot for this purpose, where the water can be dammed up to a height of 60 feet above the top step of Trinity Church. Its position is shown in the general plan Drawing No. 8, and the contour survey, from which its area and capabilities are calculated, is shown in Drawing No. 5.

In England, and in the neighourhood of a town where there is much smoke, it is considered necessary to cover in the distributing reservoirs, to protect water from atmospheric contamination.

In the case under report, I do not think it necessary; but I recommend that it be securely fenced round by a wall, and the bottom and slopes of the reservoir carefully pitched with rubble stone, of which an abundance exists in the neighbourhood.

The distributing reservoir, as shown, contains in the upper sections two days' full supply for 1,00,000 inhabitants,—from it, a main of 24 inches diameter would be laid, as shown on Drawing No. 8, with branch mains of sizes, varying according to the extent of the district to be supplied by them.

I would propose that these mains be kept constantly charged, unless it is found that undue advantage is taken of the circumstance to waste the water.

At convenient points, regulating valves would have to be introduced for the purpose of adjusting the supply and for necessary repairs.

The length of the distributing pipes or mains is 15 miles, as shown in Drawing No. 8, and in estimating the cost of these, I have taken Mr. Hawksley's rule as applied to the water distribution at Calcutta, *viz.*, Rs. 8,000 per mile, which allows amply for all necessary stand pipes, valves, and cisterns.

The districts to be supplied are—

The Barracks, including the Hospital.
The Bungalows of European residents.
The Railway Stations.
The Bazaar.
The Native Town.
Keamaree—including the supply of the Shipping.
Ghizree and Clifton.

I consider that the mode of affording the supply by means of open cisterns is highly objectionable and to be avoided wherever practicable. The water contained in them is liable to be defiled in a variety of ways, and the native would find his caste prejudices constantly interfered with.

I, therefore, recommend the adoption of stand pipes, either single or in groups according to the district requirements.

These stand pipes to be furnished with a spring valve, which only allows the water to run so long as the valve is kept open by the pressure of the hand, and immediately closes upon its being withdrawn. This arrangement has a tendency to prevent waste, and gives the water pure and uncontaminated to all applicants. In connection with each set of stand pipes, a small cistern should be provided for the use of animals. This cistern would be fed from the waste water, or, if required, may be filled by opening one of the valves.

I would propose that each block of barrack-buildings be furnished with a range of such stand pipes in the most convenient position ;—that, between each two compounds in the European quarter, one stand pipe should be placed common to both, unless a proprietor is desirous of having a private one in his compound,—for which the actual extra cost would be charged.

Throughout the Bazaar and in the Native Town, the same mode of supply to be adopted, also at intervals along the Napier Mole.

For the supply of the Shipping at Keamaree, facilities for rapidly filling the ships' casks could easily be given, details of which it would be superfluous to enter into.

The outlying districts of Ghizree and Clifton would require a long range of pipes for their supply, involving a very considerable outlay, without attaining corresponding advantages.

The Ghizree Sanitarium becomes the most important object of supply, should the Goverment remove the dockyard from Ghizree Bander, as is, I believe, contemplated, I would, therefore, propose to lay a line of pipes in the direction shown upon Drawing No. 8, which passes a plot of land lately thrown out of Camp limits for the purpose of inducing the erection of private dwellings. This line of pipes would, for the present, terminate at a point within easy access both of the Sanitarium and Clifton.

Should the latter ever become sufficiently extensive to warrant the outlay, a special line of pipes for its supply might be laid down.

I have thus, I trust, shown satisfactorily that, by the erection of a dam at Dumlote, a reservoir may be formed of ample dimensions for storing a full supply of good water for the inhabitants of Kurrachee, that the water shed or drainage area, from which that supply is to be obtained, is far larger than is necessary for furnishing it even under the most disadvantageous circumstances, which the meteorological observations give reason to provide for.

That the line of country between Dumlote and the point selected for the distributing or service reservoir, is very favorable for laying a main pipe, having an average fall of 9·33 feet per mile, without any abrupt bends, or even an objectionable curve.

That from a service reservoir placed as shown on the Drawings, a series of mains may be laid which would afford a constant supply to all parts of the Town.

Estimate. I now proceed to the estimate of its cost.

Wages, both to the skilled and unskilled labourers, have doubled, and, in some instances, trebled, their amount since the commencement of the Railway works, and the Harbour improvement works have lately slightly enhanced them.

I see no reason to think that there will be any fall in the scale of wages at any rate for some years, and until the number of inhabitants has very largely increased.

In fixing the rates, at which to calculate the cost of any portion of the work dependent upon native labour, I have taken as my basis the rates at which similar classes of work are being executed upon the Railway.

With regard to the cost of pipes, which is the most serious item, I have obtained from England the present current rates for pipes—it is as follows:—

Diameter inches.	Weight per yard lb.	Glasgow. Price per yard.	Glasgow. Price per cwt.	Liverpool. Price per yard.	Liverpool. Price per cwt.	London. Price per yard.
15" Socket Pipes ...	290	0 13 2	0 5 1	0 14 0½	0 5 5¾	0 5 3
14" Do. ...	270	0 11 10	0 4 10¾	0 12 9	0 5 3½	0 13 8
12" Do. ...	214	0 9 3	0 4 9½	0 10 0	0 5 2¾	0 11 9
9" Do. ...	149	0 6 2	0 4 7½	0 6 8	0 5 0	0 7 2
6" Do. ...	89	0 4 1	0 4 0	0 4 4	0 5 5½	0 4 8
3" Do. ...	36	0 1 7	0 4 8¼	0 1 8	0 5 2	0 1 10
2" Do. ...	24	0 1 0	0 4 8	0 1 1	0 5 0¾	0 1 2
Irregular Pipes—all sizes ...		£8 10 0		£8 17 6		£9 5 0 ℔ ton

Valves all sizes 20·0 per inch in diameter.

The pipes are all in 9 feet lengths, except the 2", which are in 6 feet lengths, in each case exclusive of the socket; F. O. B. in all cases.

The above price list does not include pipes of the sizes I propose, but by taking the weight at 420 lbs. per yard, and giving the proportionate increase to the price according to the diameter, the cost would be F. O. B.

		s.	d.
At Glasgow per yard	...	19	0¾
At Liverpool „	...	20	3¼
At London „	...	22	1

A small additional percentage would have to be allowed upon these prices, if every pipe were required to be proved.

I have received an offer from a first class London firm, offering to supply best straight cast iron pipes of all sizes to stand 300 feet pressure, at seven pounds per ton. Irregular pipes, eleven pounds valve, one pound per inch in diameter. Hydrants, nine pounds, each, F. O. B., Liverpool.

In 1850, the Corporation of Liverpool advertised for contracts for the supply of their 44 inch mains, 20 miles length, when the following tenders were received. I give them in a full, as they form an excellent basis for calculations on this subject.

CONTRACTS FOR 44-INCH PIPES.

The London and Vulcan Iron Company.

Thickness of metal in the Barrel.	No. of Pipes required.	Mean weight of each pipe.	Extent of Deviation. From	Extent of Deviation. To	Proof pressure in vertical attitude of water.	Price per ton.
						£. s. d.
1 7/16	200	75 0 25	73 2 8	76 3 22	500	
1 1/2	680	78 2 11	76 3 22	80 1 9	500	4 6 8
1 9/16	200	81 3 26	80 1 9	83 2 25	600	
1 5/8	200	85 1 14	83 2 25	87 0 3	600	

Branches, Bends, Flaunch Pipes, and other special castings .£6 10s. 0d.

Messrs. Neilson & Co.

1 6/16	380	68 2 0	66 3 11	70 0 23	400	4 8 0
1 5/8	470	71 3 12	70 0 23	73 2 8	500	4 7 6
1 7/16	570	75 0 25	73 2 8	76 3 22	500	

Branches, Bends, Flaunch Pipes, and other special castings at £ 1 18 s. per ton extra.

Messrs. Goldie & Co.

1 1/8	1,000	58 1 24	56 3 7	60 0 16	300	4 15 0
1 3/16	1,200	61 3 5	60 0 16	63 1 26	400	4 12 6
1 1/4	270	65 0 15	63 1 26	66 3 11	400	

SUMMARY.

Contractors.	No. of pipes.	Tons weight.	Price.	Amount.
London Vulcan Iron Company...	1,280	5,098	4 6 8	
D. Y. Stewart and Company ...	4,500	11,993	4 15 0	
Goldie and Company ...	1,000	2,923	4 15 0	
Do. ...	1,470	4,587	4 12 6	
Neilson and Company ...	380	1,302	4 8 0	
Do. ...	1,044	3,833	4 7 0	

The pipes thus contracted for weighed 28,429 tons, which cost £1,30,536 or £4 11*s.* 9*d.* per ton, on an average. At this time, the price of Welsh No. 1 Pig Iron, was £3 10*s.* to £3 12*s.* 6*d.* per ton.

By the last quotations, £3 10*s.* was the price of No. 1 Welsh Pig. Taking all things into consideration, I consider that if put up to public competition, contracts might be obtained for the supply of 18 inch mains, F. O. B., Glasgow or Liverpool, for five pounds, ten shillings per ton, subjected to the full proof of 300 feet of water pressure.

The rates of freights, between ports in England and Bombay or Kurrachee, have varied within the last 3 years from 27 *s.* to 45 *s.* per ton.

I have made careful enquiries from different merchants on this subject, and have come to the conclusion that a contract might be obtained with a first class firm to supply the freight at 40 *s.* per ton, provided the total deliveries were spread over 2 years of time.

The landing charges I put down at Rs. 1¼ per ton, and base this estimate upon the actual cost to the Railway Company for the landing of all their heavy stores, during the last three years.

I presume that no duty will be charged by Government upon materials coming out for purposes so manifestly conducing to the public benefit.

I thus arrive at the conclusion that the pipes will cost as follows:—

	£	s.	d.	
F. O. B. at Glasgow or Liverpool ...	5	10	0	per ton.
Freight and Insurance ...	2	0	0	„
Cost of discharging and landing at Kurrachee	0	2	6	„
Contingencies at 5 per cent. ...	0	7	6	„
Total £ ...	8	0	0	per ton.

and at this price I have estimated.

I have good evidence in my possession that the delivery of these pipes, on the ground along the whole line, would be contracted for here at the rate of 8 annas per ton per mile. The average distance from Kurrachee would be 13 miles.

Exclusive of earth-work, the cost of laying and jointing this main, I estimate at $2\frac{1}{2}$ rupees per yard forward, which includes lead and yarn for joints, with all labour.

The cost of casting out and refilling the Trench, I have taken at Rs. 1-4-0 per 100 cubic feet.

As I have stated previously in this Report, I take Mr. Hawkley's calculation of Rs. 8,000 per mile as the estimate for the distribution pipes including all necessary stand pipes, hydrants etc.

L (IV) 355—77

Estimate of the probable cost of supplying Kurrachee with water.

Kurrachee, 13th October 1860.

Quantity.	Details.	Rate.	Per	Amount.	Total.
	MAIN CONDUIT PIPE AS PER DETAIL A.	Rs. a. p.		Rs. a. p.	Rs. a. p.
10,211 tons 2 cwt. ..	Delivered at Keamaree	80 0 0	Ton.	8,16,888 0 0	
10,211 „ 2 „ ...	Delivered along line of pipes, an average distance of 13 miles, at (8) eight annas per ton per mile	6 8 0	Ton.	66,371 8 0	
54,996 yards ...	Laying	2 8 0	Yard.	1,37,490 0 0	
34,849 (100) feet ..	Casting out and refilling Trench ...	1 4 0	100 Feet.	18,561 4 0	
	Fifteen (15) miles Distributing Pipes, calculated at (8,000) eight thousand Rupees per mile	8,000 0 0	Mile.	1,20,000 0 0	10,39,310 12 0
					1,20,000 0 0
	DUMLOTE RESERVOIR—WEIR AND BUND.				
308,285 cubic yards ..	Earth-work in Bank	0 8 0	Cubic Yard.	1,54,142 8 0	
27,822 „ „ ...	Stone-work and Pitching	3 8 0	Do. ...	96,677 0 0	
20,750 „ „ ...	Concrete	3 12 0	Do. ...	77,812 8 0	
					3,28,632 0 0
	DISTIBUTING RESERVOIR.				
10,000 cubic yards ...	Earth-work	0 8 0	Cubic Yard.	5,000 0 0	
3,000 „ „ ..	Pitching and Masonry	3 8 0	Do. ...	10,500 0 0	
					15,500 0 0
	Valve Tower and Valves ...	...	...	...	10,000 0 0
	Add 5 per cent. for contingencies and management.	...	...	...	15,13,442 12 0 75,672 2 2
					15,89,114 14 2
			Grand Total Rupees ...		15,89,144 14 2

	Inches diameter of pipe	Thickness of metal.	Equal to pressure of a column of water in feet.	Number of pipes of each thickness.	Length in yards of each thickness.	Mean weight of each description per yard.	Total weight of each thickness.	Detail A.
						lb.	tons ct. qts.	
29,920 yards should be $\frac{3}{4}$ in thickness	18	·713	150	9,974	29,920	411·0	5,489 15 3	From Dumlote to the Lower or distributing reservior.
10,560 yards $\frac{7}{8}$	18	·87	220	3,520	10,560	483·0	2,277 6 0	
3,410 yards 1 in thickness ...	24	1·00	220	...	3,410	745·0	1,119 7 0	Distributing pipes (Mains only) at 80 Rs.
This would be sufficiently strong, if it could be cast $\frac{3}{4}$, having to resist a head of 60 feet, only ..	...	·62	200	...	11,106	267·0	1,324 14 0	
				Yards ...	54,996	Tons ...	10,211 2 0	
26,400 yards $\frac{3}{4}$, varying sizes from 3 to 11—15 miles ...	...	...	...	...	...	...	...	15 miles reckoned at Rs. (8,000) eight thousand per mile, in estimate.

Cost of present supply.

At present, the cost of the insufficient water-supply to the inhabitants of Kurrachee is enormous.

In Appendix A, is a return from the Commissariat, showing the cost to Government of the supply to the Troops. It amounts to an annual sum of Rs. 49,309, exclusive of wear and tear and depreciation of stock, which, on the lowest estimate, cannot be less than Rs. 10,000. The annual outlay, then, on this head is Rs. 59,309 for the supply of 11,328,870 gallons.

It is almost impossible to ascertain the exact number of individuals supplied from this source, but, taking into account the number of camp followers, it cannot be less than 6,000, besides about 500 horses. This gives something under 5 gallons per head per day. Every one will allow that this is a most insufficient supply.

Captain DeLisle, in his Report, dated 11th August, 1857, calculates from data, which I believe to be rather over than under the mark, that the water supplied to the inhabitants of Kurrachee, including Ghizree and Keamaree, costs $2\frac{1}{2}$ rupees per 1,000 gallons. This calculation was made when Bhistie Bullocks could be hired at about half the price now ruling. My belief is that the average cost at present is at least $3\frac{1}{2}$ rupees per thousand gallons.

To individuals at a distance from the wells from which the supply is drawn, the cost is at least 5 rupees per thousand gallons.

But the Mulleer scheme I have proposed, the cost per thousand gallons for an unlimited supply would not be more than 4 annas or $\frac{1}{14}$th of the present cost, after allowing amply for maintenance of works and superintendence.

It remains for the Municipal authorities to consider what will be the best means of raising the necessary capital to execute the works, and what would be the fairest and simplest mode of assessing the consumers in order to pay the interest on such capital.

To carry out the scheme in its entirety, would require a capital of £160,000 which, on interest at 5 per cent., and with a Sinking Fund at the rate of $7\frac{1}{2}$ per cent. on the original capital, would need an average annual payment for 14 years of about £18,000, this would be at the rate of $5\frac{3}{4}d.$ per 1,000 gallons for the quantity supplied for that term, at the end of which the whole would be free from incumbrance.

Should Government be disposed to contribute its support to the scheme by continuing its present rate of payment, (£5,900), until the debt is liquidated, it would have paid by that time the sum of £83,000, or rather more than one half of the original capital, thus leaving £12,000 to be raised yearly by the Municipal authorities by rate, or otherwise, as may be determined on.

As the whole sum would not be at once required, the first instalments would be proportionately light.

Time required for completion.

This will entirely depend upon the facilities which may occur for the delivery of the main conduct and distributing pipes. I consider that two seasons will be required for the construction of the Dumlote dam. The first to get in all the foundations, and the second for the superstructure.

There need be no delay in the laying of the pipes, which could be easily done as fast as they are delivered.

If this delivery can be achieved in two years, which I think quite possible, there is no reason why the whole of the works should not be completed in two and a quarter years from the date of the pipe contract being signed, or earlier, if arrangements can be made for a more rapid delivery of the pipes.

I would here call special attention to the necessity which, from a sanitary point of view, will exist that the sewerage and drainage, generally, of the whole area supplied with water, be most carefully carried out and attended to simultaneously with the execution of the water-works now proposed.

To bring into a town such a large water-supply as this scheme provides for, without taking steps to carry off the waste would only be inducing malaria, and consequent disease.

In conclusion, I have great pleasure in acknowledging the good service rendered me by the Municipal Surveyor, Mr. Jugganath Suddasewjee, whose assistance with that of his Engineering Class, was placed at my disposal by the Municipal authorities.

I have the honour, etc.,

(Sd.) JOHN BRUNTON, M.I. C.E.

Kurrachee, 23rd October, 1860.

APPENDIX A.

(*Copy.*)

NO. 2591 OF 1860.

KURRACHEE, COMMISSARIT OFFICE,

16TH JUNE, 1860.

To

THE ACTING COLLECTOR OF KURACHEE.

SIR,

With reference to your letter No. 1047 of the 14th instant, to my address, I have the honour to transmit a statement exhibiting the annual expenditure incurred by this Department in supplying water to the Troops, the Navy, etc., etc., with a Memorandum showing the quantity supplied to each Department, separately.

I have the honour, etc.

(Sd.) A. LUCAS, MAJOR,
Acting Assistant Commissary-General.

Statement showing the annual cost to Government of the Establishment required for supplying water to the Troops, Navy, etc., etc., exclusive of wear and tear of carts, animals, &c. :—

Feed and keep of 102 pairs of bullocks for drawing and conveying water	Rs.	46,345	0 0
Pay to 1 Muccadum and 34 Dooly bearers for filling water, etc. ...	„	2,964	0 0
Total expense of Establishment per annum	Rs.	49,309	0 0

Memo. of the probably quantity of water supplied to Troops, the Navy, and other Departments, separately :—

To the Troops and Hospitals ...	8,395,000	gallons.
Raja and Ranee of Sattara, and Raja of Kolapoor, State Prisoners ...	427,050	„
Building Yard, Commissariat Establishment, Custom Department, and Steamers at Keamaree ...	1,185,520	„
Manora Station	245,280	„
Ghizree Station and Steamers.	382,520	„
Sanatarium at Ghizree ...	365,000	„
Barrack and Medical Stores ...	146,000	„
General Hospital ...	182,500	„
Total quantity of water annually supplied	11,328,870	gallons.

(Sd.) A. LUCAS, MAJOR,
Acting Assistant Commissary-General.

COMMISSARIAT OFFICE,
Kurrachee, 16th June 1860.

(*Copy.*)

APPENDIX B.

To

J. B. DUNSTERVILLE, ESQUIRE,
COLLECTOR OF KURRACHEE, AND
PRESIDENT OF THE MUNICIPALITY.

Bombay, 13th August 1860.

In May last, I received from Doctor Giraud your letter to his address, No. 804, dated the 17th May 1860, advising the despatch of a box of various samples of water with reference to a scheme for the supply of Kurrachee. I obtained the box at last, though not till after much delay and repeated trials by sending messengers both on board the steamer and the Company's Offices, owing to the great discourtesy displayed by the persons who had charge of it.

2. The injunctions contained in your letter led me to believe that more than an ordinary qualitative examination was required, and I, therefore, determined to estimate qualitatively the amount of the principal constituents of the several samples of water, not withstanding the time and labour that would necessarily be consumed in the work. From press of business, I was unable to commence this immediately, but I took it in hand on the first opportunity.

3. The analysis of the solid contents of a water is troublesome in proportion to the smallness of these contents, as the unavoidable loss from the solvent action of the water and the volatility of some of the so called fixed constituents, tends to introduce error, which is multiplied in proportion to the smallness of the total amount of material upon which the loss takes effect. But I have met with a difficulty different from any which I could have anticipated, and which, being discovered at the last moment, has rendered almost ineffective the whole labor expended upon the analysis—it is, that the water in several of the bottles under the same letter differs extremely.

4. To ensure accuracy, it is customary, if there is water enough, to estimate the amount of most of the constituents on separate quantities of liquid; in doing this, and relying upon the identity of the water in the several bottles, I took parcels of water indiscriminately from more than one bottle marked with the same letter. On summing up the result, I found them in

several cases quite unintelligible, the errors being far beyond what the most careless manipulation could give rise to; and in proceeding to repeat some of the experiments for verification, I found that, while in some cases the results differed extremely from my former ones, in others, using the same bottles as at first, they came out identically as before. Further experiments have shown me conclusively that the difference is so general, and so extremely confusing, as to exclude the possibility of any approach to correctness. Thus, in one bottle, marked A., I found very nearly three times as much common salt as in another, and in one bottle, marked E., there was twice as much as in another of the same letter. Much time was spent in attempting to solve the difficulty before this discovery was made, but afterwards it was useless to proceed further, and it is, I fear, too late to commence anew.

5. The fact of the difference is so decided, and so easily verified by simple experiment, that no doubt whatever is permissible regarding it. Whether the water of the several bottles has been taken from different parts of the stream or reservoir, whether the contents have become interchanged, or whether change to such an extent has occurred in the bottles themselves, I will not attempt to determine.

6. I can do no more, therefore, than state separately some of the chief results yielded by the particular portion of water upon which I operated without attempting to combine these into a complete analysis. In fact, the waters are all of good quantity; D. appears to be the hardest, and A., C. and F. the softest. The merest traces, only, of organic matter were found in any, and that, in all probability, derived from the corks, which were old corks out of wine bottles. I should say that C. is, on the whole, the purest.

7. To the preceding remarks, an exception must be made in the case of the water B., in the analysis of which no similar discrepancy appeared, and the total amount of solids also agrees very well with that deduced from the specific gravity. I have, therefore, appended its analysis in full.

I have the honour, etc.,

(Sd.) ROBERT HAINES,

Acting Chemical Analyser to Government.

TABLE I.

The numbers indicate parts in 10,000 of water.

	A.	B.	C.	D.	E.	F.
Specific gravity.	1000·72	1000·54	1000·44	1000·75	1001·10	1000·69
Carbonate of lime ...	1·160	1·328	1 252	1·720	1·011	1·136
Do. magnesia ...	·908	·757	·621	·247	1·151	1·120
Lime	·241	·333	·161	·611	·257	·289
Magnesia	·210	·113	·187	·269	·037	·135
Chlorine ..	2·281 / ·825	1·598	1·731	2·281	2·689 / 1·473	2·130
Chloride of sodium ...	4·445	2·485	2·185	not tried.	not tried.	not tried.
Silica and oxide of iron ..	·100	·310	·386	·756	do.	do.
Sulphuric acid	·334	·601	·479	·851	·741	·896

TABLE II.

Solid constituents in water marked B., in 10,000 parts.

Chloride of sodiun	2·485
Sulphate of lime	·809
Chloride of magnesium	·115
Sulphate of magnesia	·188
Carbonate of lime	1·328
Do. of magnesia	·757
Silica and oxide of Iron	·310
Total ...	5·992
Total solids by evaporation ...	5·490

APPENDIX C.

Locality.	Water at Kurrachee (Selected).				
	21 Bed of the Lyaree River H	22 Camp Water Company's Well, near Government Gardens. H	22 Well on the Bander Road, in front of Messrs. Warwick and Waller's premises. H	22 Well on the Bander Road, near Muchee Meanee. H	25 Well on the Rutton Tank. H
Date of collection.	June, 1859.	June, 1859	June, 1859.	June, 1859.	June, 1859.
Specific Gravity at 60 Degs.	1,000·4	1,000·9	1,006·6	1,037·8	1,001·4
Chloride of sodium ...	2·35	8·12	58·20	423·75	9·48
Do. of magnesium ..	·02	...	...	...	...
Do. of calcium ...	·66	...	...	...	...
Sulphate of soda ..	...	·78	4·35	47·73	2·02
Do. of magnesia ...	...	·05	6·61	76·85	·02
Do. of lime ...	·53	·69	·44	12·04	·45
Nitrate of magnesia ..	...	...	...	...	...
Do. of lime ...	...	...	...	...	...
Carbonate of magnesia ...	·04	·38	1·09	2·91	0·95
Do. of lime ...	·55	·96	2·37	2·37	1·26
Silica	(X)	(X)	(X)	(X)	(X)
Organic matter in solution ...	...	...	...	...	...
Do. suspended...	...	...	...	...	...
Total solids ...	4·15	10·98	73·05	561·65	14·11
Gaseous contents ...	...	...	...	...	...

Nos. 21 to 25.—These waters are some of 19 specimens, taken from all the wells and tanks in use at Kurrachee. The difference in the quality of the water is extreme; Nos. 21, 22 and 25, are fair, drinkable waters; in No. 23, there is a large impregnation of common salt; and in No. 24, the saline matter is present in enormous quantity; the water is strongly brine, twice as salt as sea water.

(Extract from the "Sindian," dated 10th November, 1860.)

LOCAL.

KURRACHEE WATER-SUPPLY.

As would be seen by the advertizement in our columns, a General Special Meeting of the Kurrachee Municipality was called for yerterday, to consider the question of the supply of water to Kurrachee, to which all interested were invited to attend. Accordingly, at noon precisely, J. D. Inverarity, Esq., C.S., Commissioner in Sind, took the chair. We observed among those present, Major Goldsmid; J. Shaw Stuart, Esq.; Captain J. B. Dunsterville; Captain Church; Drs. Grierson and Bean; Captain Pirie; Major Murray; Colonel Turner; Messrs. Brunton, McIver, Meiklejohn, Dunolly, Maher, Ingle, Hill, &c., &c., and Seths Naomull, Khemchund, Adam Alli, Dinshaw Perozeshaw, and about 15 other leading Native gentlemen.

The Commissioner commenced proceedings by reading the correspondence with the Supreme Government upon the subject in hand, by which it appeared that the Government considered this as a question to be dealt with municipally, holding itself at the same time liable to contribute in a full and fair degree, on account of the benefits it would itself derive. He then stated that, in consequence of a Resolution come to at a prior meeting, the Municipality had devoted a sum of five thousand Rupees for the completion of a proper and sufficient survey, which had accordingly been entrusted to Mr. J. Brunton, the result of whose labours was now before the meeting. It appeared to him that it was a false view of the subject to consider the interests of the Camp and Town of Kurrachee as dissevered in the matter. The welfare of the one was intimately wound up with that of the other. He adverted to the very precarious and insalubrious nature of the supply of water as at present existing, and pointed to the possibility of its becoming necessary, during the present season, of obtaining a supply of water from Mulleer, which it would be impossible to accomplish had it not been for the Railway. He also reminded the meeting that drought and rainy seasons apparently recurred in cycles of nine years; and with the daily increasing population, it was necessary to provide against the contingency by an ample water supply; or it could not be expected that Kurrachee would be the Town it might otherwise be. He then requested Captain Dunsterville to read the report of the survey, which we do not republish, as it has been extensively circulated. The illustrative plans and sections were also displayed. The Commissioner then recapitulated, in brief, the main features of Mr. Brunton's scheme. The cost would be about sixteen lacks of Rupees, or nearly double that of Captain DeLisle, but on the other hand, it contemplated the construction of a reservoir, calculated to store sixteen months' consuption of water for a lack of inhabitants,—Captain DeLisle's only providing for the wants of forty thousand. When a full sixteen months' supply had been furnished, there would, moreover, be a full depth of 24 feet in the reservoir. The pipes would be 23 miles in all, as against 16 of a smaller calibre proposed by Captain DeLisle, which, of course, constituted a considerable item in the expense. He then read a letter from Captain Lidbetter, Lloyd's Agent, expressing his regret at not being able to attend the meeting, and his full concurrence with its object. He pointed out the great inconvenience that ships were put to by the deficient supply of bad water they were obliged to leave port with, compelling them to touch elsewhere. It was, continued the Commissioner, now a question for the public to decide, as to whether the scheme should be carried out by the agency of the Municipality, or by any other, Government being willing to contribute its quota? He therefore, left it to the meeting, trusting that it would receive full and fair discussion as a public question, and, not with reference to any private or personal insterests. Mr. N. Warren asked, as some objection had arisen on a former occasion, as to whether it was intended to let the Military authorities have a voice in the matter. Mr. Inverarity replied that the original idea was purely Military, and originated with Sir Charles Napier, who would have pressed it to an issue had it not been for the Sikh War, and subsequent financial depression. The increase of Kurrachee had now, however, rendered it a municipal one. The Military authorities had been fully consulted throughout, as would be proved by a Minute of Sir Bartle Frere, which he proceeded to read.

Mr. Shaw Stewart wished to know if the expense could not be materially reducced, by providing for a less water-supply, say for 50,000?

Mr. Brunton could not answer the question in figueres on the spur of the moment but might give it as his conviction that, at the very utmost, any saving so effected would not amount to twenty per cent. Colonel Turner said that, in his opinion, the provision made was the very lowest that could be safely done, and that any alteration should be rather in the way of amplification than reduction.

Captain Dunsterville asked if two smaller pipes, say 10 inch ones, could not be substituted for the 18 inch one, so as to provide against accident?

Mr. Brunton replied that it would be unsound in theory, as the friction would be augmented. There was little fear of accident, as the pipes would be tested with a pressure of 300 feet before laying.

Colonel Turner asked what data Mr. Brunton had as to the rain-fall in the District where he proposed to have the reservoir.

Mr. Brunton had not any, beyond the information afforded him by those who knew the country. Captain Dunsterville and Mr. Maher spoke as to their experience of the fall.

Colonel Turner then asked if Mr. Brunton had turned his attention to the Hubb River, which had the advantage of being double the volume of the Mulleer, and being drawn from a greater water-shed.

Mr. Brunton replied that he had, but found that the ground was not favourable involving a tunnel, except a considerable detour were made. There was a territorial, question also involved that might cause dispute; and, above all, the fall would be much less than the one attainable by the reservoir he had proposed. The capabilities of the works might be increased, if necessary, by bunding the Mulleer above the present dam, and making this one a subsidary reservoir.

Mr. Warren proposed, as a Resolution, that the plan submitted to the meeting by Mr. Brunton be adopted, and the Committee of the Municipality be desired to consider the best means of raising the requisite funds.

Mr. Maher seconded the motion.

Mr. Shaw Stewart proposed an amendment to the effect that Government should be asked to advance the funds, on security of the municipal dues, and the rate of five per cent. payment of the principal not being demandable for thirty years, but an option given to the Municipality to pay off the debt in the meanwhile, if possible, in convenient sums.

Mr. Warren objected that this tied the Municipality to one mode of action only, whereas it was necessary that they should be at liberty to consider any mode presented to them. He did not consider that Government could lend money at a rate of interest at which it could not borrow itself.

After considerable discussion, the amendment was withdrawn and the original motion carried almost *nem con*, only three hands being held up against it. Some further conversation was held on the same subject, and as to whether or not the question of raising the money should be decided at once. The Commissioner, after reading the notice convening the meeting, said that he could come to no other conclusion than that it represented the whole of the community of Kurrachee; and that, the only question before them having been disposed of by a large majority, it rested with the Committee now to consider the ways and means, when and how they pleased. He, therefore, declared the meeting dissolved.

A vote of thanks to Mr. Inverarity was proposed and carried by acclamation, and the meeting separated with the exception of the members of the Municipal Committee.

No. 57 of 1861.

Public Works Department.

Report of the Commissioner on Memorandum No. 408 of 28th February 1860 from the Secretary to Government.

The Commissioner in Sind has the honor to report as follows:—On the 13th October 1857, Mr. Frere, Commissioner in Sind, addressed the Government of Bombay on the subject of the necessity for providing Kurrachee with an abundant supply of wholesome water, that procurable in its immediate vicinity being bad and scanty. He had previously, in May of the same year, requested Captain DeLisle, of the Engineers, to examine the whole subject, and this Officer accordingly proposed a scheme for bringing water from the Mulleer, and for distributing it throughout the Camp and Town of Kurrachee, and to the Shipping at Keamari and Ghizree.

2. On the supposition that suitable 18 inch earthen-ware pipes could be manufactured in Kurrachee, the expense was estimated at $3\frac{1}{2}$ lacs of Rupees. With iron piping, the scheme was roughly estimated to cost 9 lacs.

3. Mr. Frere proposed two modes of providing the sum required. 1st. By Government, who should undertake the work, and repay themselves partly by the reduced cost to themselves of the supply required for their troops and public departments, and partly by charging for the water supplied to private individuals and companies. 2nd. By the Municipality of Kurrachee, who should be empowered to borrow the money required, and to impose special rates to provide for the extinction of the debt in given time.

4 Financial pressure prevented Government adopting the first proposition, and the Commissioner was desired to submit a draft Act to enable the Municipality of Kurrachee to raise the necessary funds. It was directed that this draft Act should provide for the management of the water-works being vested in the Municipality, for the repayment, with interest, of

the sum borrowed by a rate to be raised for the purpose; this rate being limited to a reasonable maximum, for a public supply of water being available in reservoirs conveniently situated for the rate-payers; and for the sale of water delivered in houses, or for gardening, manufacturing, or other purposes, for which large supplies are required,—the proceeds of sale being brought to account in diminution of the general rate.

5. A draft Act was accordingly prepared, sent to the Bombay Member of the Legislative Council, read in an amended form a second time on the 20th August 1859, and referred to a Select Committee to be reported on after the 24th November following.

6. A General Meeting of the Municipal Commissioners and rate-payers of Kurrachee was held on the 30th September 1859, Sir Bartle Frere in the Chair. At this Meeting, the subject was warmly discussed, a Sub-Committee was appointed to re-consider certain parts of the Bill, and their report was submitted to Government on the 24th October 1859. In the meantime a petition from one hundred and forty four of the chief house-holders of Kurrachee, who prayed that the Billbe not passed was presented to the Government of India. Their petition was referred to the Collector of Kurrachee, who reported that the opposition to the Bill arose from obections entertained to the imposition of a house-tax as thereijn proposed. This report was forwarded by the Government of Bombay to the Government of India, with a recommendation that the porposed enactment be for the present abandoned.

7. In their reply, No. 249, dated 7th February 1860, the Government of India considered it quite reasonable and proper that measures should be taken for improving the supply of water to Kurrachee, and that the expense of such measures should be defrayed by special and local taxation. At the same time, it was desired that, in carrying out such necessary measures, the wishes of the community should be consulted, and the Commissioner was instructed to report further after communication with the people.

8. The sentiments of the Government of India were communicated to the Municipality and the inhabitants of the town and suburbs of Kurrachee, through the Collector, and the survey of the country and the preparation of a scheme for providing the requisite water-supply was entrusted to Mr. John Brunton, C. E.

9. His report, a printed copy of which is annexed, with plans, sections, and drawing, was submitted to a General Meeting of the inhabitants of Kurrachee held on the 9th November, last, the proceedings of which meeting, as given in a local paper, are appended.

10. Mr. Brunton proposes, by means of an impounding dam, 800 feet in length, and of an adequate height, to create a reservoir at Dumlote on the Mulleer River, capable of containing upwards of 1,666 millions of gallons of water, This reservoir would give a head of water 241 feet above the top step of Trinity Church, Kurrachee, and 197 feet above the bed of the distributing reservoir, proposed to be constructed in rear of the Cantonment. The distance of this distributing reservoir from Dumlote is 23 miles, and the fall would, therefore, be about $8\frac{1}{2}$ feet per mile.

11. It is proposed to have iron piping from England, and the estimated cost of the main conduit pipe is entered at Rs. 10,39,310 and that of the distributing pipes at Rs. 1,20,000. This, as Mr. Brunton truly observes, is the most serious item, and most serious will it doubtless be found to be, when, from heat and from the saltness of the soil, corrosion of the metal renders the pipe useless. The Commissioner has seen an estimate for a masonry aqueduct from Dumlote to the distributing reservoir, in which the probable cost is put down at 7,00,000 Rupees. The cost of the reservoir at Dumlote is put down at Rs. 3,38,632, and that of the distributing reservoir is entered at Rs. 15,500. The total of these sums gives a cost of Rs. 15,13,442, and an additional 5 per cent. for contingencies and management, (Rs. 75,672), being the aggregate cost of the proposed work, up to 15,89,114 Rupees.

12. Mr. Brunton's plan is stated to be equal to supplying 20 gallons a day per head to 1,00,000 of people, and an additional 50,000 gallons a day for the Railway and Shipping.

13. As seen from the printed report of the public meeting held on the 9th November, last, and from the Collector's Reports, No 2218, dated 8th December, following, and No. 5, dated 6th ultimo, Mr Brunton's plan and report were adopted, and the Municipality were requested to consider the best means of raising funds for the execution of the project.

14. The Municipality, through their President, the Collector, having undertaken the project as a local measure, now ask of Government a loan of 16,00,000 Rupees, repayable at the rate of one lac of Rupees per annum, together with interest re-payment to commence from the date water is distributed in Kurrachee. Should Government decline to advance the loan sought for, the Municipality then desire to know whether Government would guarantee 5 per cent. on the capital of 16,00,000 Rupees, if borrowed elsewhere.

15. The Commissioner cannot recommend that Government should, at the present time, entertain either proposition. Were the Municipality to exercise a little self-reliance, and to make generally known their desire to borrow on certain terms, the Commissioner has but little doubt that capitalists would be willing to provide the necessary funds on the proffer of sufficient security. The Commissioner has received a letter from Mr. Neville Warren, dated 29th November, 1860, hereto appended, in which this gentleman expresses his belief that he can procure the required capital of £ 1,60,000 in England, provided the sum of £ 18,000 per annum, required to secure 5 per cent. interest per annum, and an amortization fund to pay off the capital in 15 years, can be guaranteed or secured in any way.

(Sd.) J. D. INVERARITY,
Commissioner in Sind

COMMISSIONER'S OFFICE,
Camp Hyderabad, 8th March 1861.

No. 327 of 1862.

GENERAL DEPARTMENT,

Bombay Castle, 25th February 1862.

To

THE COMMISSIONER IN SIND.

Sir,

With reference to the previous correspondence regarding the supply of water to Kurrachee, ending with your report No. 57, dated the 8th March 1861, I am directed to state that it has been brought to the notice of the Governor in Council that along the Lyaree which passes Kurrachee there is a particular formation in which it is supposed there is always an abundance of water and that His Excellency in Council considers that before finally sanctioning any scheme for supplying Kurrachee with water, this locality should be carefully examined. I am accordingly instructed to request you will adopt measures to have this done and report the result.

I have, etc.,

ROBERTSON,
Acting Chief Secretary to Government.

No. 227 of 1862.

GENERAL DEPARTMENT,

True copy forwarded to the Chief Engineer in Sind with a request that he will adopt measures for carefully examining the banks of the Lyaree in the immediate neighbourhood of Kurrachee with a view of recording the formation, and the extent of supply of water contained in that formation.

J. D. INVERARITY,
Commissioner in Sind.

Kurrachee, 3rd March 1862.

L (IV) 355—79

NO. 3191 OF 1862.

PUBLIC WORKS DEPARTMENT.

CHIEF ENGINEER'S OFFICE,

Camp Kazikigoth, 29th November 1862.

TO

SAMUEL MANSFIELD, ESQUIRE,

COMMISSIONER IN SIND.

SIR,

In obedience to the instructions conveyed in Mr. Inverarity's endorsement on Government letter No. 327 of 25th February, I have the honour to submit the accompanying plan of the ground on the banks of the Lyaree in the vicinity of the Town and Cantonment of Kurrachee showing the position of the several wells from which a supply of water is derived, either for irrigation or for general consumption.

2. A list specifying the depth of each well from surface, the depth of water when measured in the months of May, June and September, the quality of the water, and other information is likewise appended. It appears that of 87 wells, 78 contain water of a good or middling quality. In addition to the supply derivable from these wells, excellent water is everywhere procurable at a short distance below the sandy bed of the Lyaree, and fresh wells might be dug with almost a certainty of obtaining drinkable water in any part of the land included in the survey.

3. The Lyaree has a course of about 26 miles, and drains a considerable area. The longitudinal section given on the plan A B E H shows a fall in the bank at the rate of 11 feet a mile. The sections of the trial pits which have been dug show the nature of the alternating strata of sand and clay. The points O and D being respectively 68·70 and 51·72 above datum, and the water in each pit 29 and 11 feet below the surface, gives the water level at 40 and 41 feet above datum, and at this level I believe water would be found throughout nearly the whole area.

4. At the points G (which is 74·52) and K (89·83) the water being at the depth of 31½ and 39 feet, is at a higher level, and ascending the valley, the water level would no doubt be found to rise, and being distributed in beds of gravel and coarse sand, must find its way down to supply the drain upon the well in the lower portion of the valley.

There is but little information as to the quantity of water which the existing wells are capable of furnishing. The three wells Nos. 24, 73 and 79 worked by the Commissariat are alone estimated to supply thirty-three thousand gallons daily: of this No. 24 supplies twenty-two thousand gallons, and has never been known to run dry. The well used by the Railway though occasionally failing furnishes after the Monsoon upwards of thirty thousand gallons daily, and Captain Maunsell states that from the appearance of the ground in which the pipe to the workshops is laid, he believes there is considerable leakage; in addition I have little doubt that a number of these large wells each capable of yielding a supply of twenty thousand gallons daily, might be constructed whenever a larger supply than is now available may be required.

6. With regard to the quality of the water, Captain Maunsell writes—

> "3. From information afforded by the Chemical Analyser to Government to whom specimens of various wells in the neighbourhood of the Lyaree River and Bander Road were sometime ago sent, it appears that most of the wells afford water remarkably free from organic matter; but they vary considerably in saline matter. No. 24 or the Commissariat well which supplies the greater portion of the community in Cantonment with drinking water, is reported as equal in purity to the ordinary river water of Europe.

7. I have drawn a thick blue line on the sections to indicate the level at which water would probably be found throughout the area surveyed.

I have, etc.,

(Sd.) C. W. TREMENHERE,
Chief Engineer in Sind.

Register of wells, 200 yards on each side of the Lyaree.

No. of well.	Depth in feet.	Depth of water.			Distance from the centre of the Lyaree in yards.	For what purpose used at present.	To whom it belongs.	Remarks.
		May.	June.	Septr.				
1	23	4	3	3¼	104	Irrigation ...	A Fukeer ...	Small good water.
2	19	2	1½	2¼	93	Do. ...	Municipality ...	Sector Shape.
3	23	1½	¼	1	110	Not used ...	A Fukeer ...	Had been used for Irrigation.
4	14	2	1	1½	160	Do. ...	Do. ...	Dirty do.
5	16	2	¼	1¼	170	Do. ...	Do. ...	Do. do.
No. 6	omitted since dilapidated and useless.							
7	25	3	2	2¼	275	Irrigation ...	Buduana ...	Middling water.
8	26	4	2½	3	80	Do. ...	Do. ...	Good.
9	25	4½	2	1½	84	Do. ...	Kurgeer ...	Very good.
10	24	2½	1	4	200	Do. ...	Do. ...	Good.
11	23	3	1	1½	155	Do. ...	Do. ..	Good, not used.
12	15	2½	2	1¼	230	Distillery ...	Kundada ...	Not good.
13	16	2½	2	3	1,100	Not known ...	Not known ...	It appears bad.
14	12	3	½	2¾	900	Irrigation ...	Bow	Very good.
15	14	2½	2	1¼	1,090	Bathing and drinking	Not known ...	Do.
17	15	2	1	1½	1,140	Irrigation and drinking.	Pestonjee ...	Good.
18	14	2	1	1	1,180	Treacher's use ...	Treachers ...	Do.
19	14	2½	1½	1½	1,340	Not used ...	Executive Engineer	Bad.
20	24	4	1½	2	1,240	Irrigation and drinking.	Major Marston ...	Good.
21	15	4	1½	2	1,080	Drinking ..	Not known ...	Good—Situated behind the Executive Engineer stores.
22	17	2	½	2½	1,270	Do. ...	Ferret	Good.
23	14	0	0	1	1,370	Do. ...	Do.	Do.
24	19	1½	½	3	1,365	This well supplying the Bander.	Municipality ...	Do.
25	24	2	1	3½	970	Balochi... ...	Do. ...	Do.
26	24	2	¼	2½	950	Do.	Do. ...	Not used, water good.
27	20	2	1	2	440	Begarees who live in the khata.	Ram Suame ...	Good.
28	17	1½	1	1½	400	Not used ...	Paymaster ...	Very bad.
29	20	0	0	0	264	Not known ...	Unknown ...	Evidently belongs to Government.
30	26	2½	1	2	110	Irrigation ...	Merwanjee ...	Not very good.

No. of well.	Depth in feet.	Depth of water.			Distance from the centre of the Lyaree in yards.	For what purpose used at present.	To whom it belongs.	Remarks.
		May.	June.	Septr.				
31	27	2	1	2	90	Irrigation ...	Damodur ..	Good.
32	30	2½	1	2	270	Do. ...	Chander ...	Do.
33	26	1½	1	3½	215	Do. ...	Tolo Bunia ...	Middling.
34	24	2½	1	2	297	Do. ...	Isram Khuja ...	Half pakka.
35	25	1½	½	2	105	Drinking and irrigation.	Esa Memon ...	Good.
36	29	1½	1½	3	105	Do. ...	Datoo Shet ...	Do.
37	31	2	1	2	96	Do. ...	Gool Futta ...	Do.
38	31	2	½	1½	94	Do. ...	Isram Kanji ...	Do.
39	30	1½	1¼	2	109	Do. ...	Taroo	Do.
40	29	1½	1	2	107	Do. ...	Parsram ...	Do.
41	26	1½	1½	2½	540	Not used ...	A shet	Bad.
42	25	2	1½	2¼	590	Do. ...	Do.	Do.
43	21	1½	0	1	572	Irrigation ...	Do.	Middling.
44	21	1½	1	2	466	Do. ...	Do.	Do.
45	19	1½	3	3¼	550	Do. ...	Hormusji Sorabjee.	Good.
46	34	7	4	6	910	Do. ...	Morad Khan ...	Middling.
47	25	3	1½	3	890	Do. ...	Do. ...	Do.
48	32	5½	2½	3	880	Do. ...	Municipal ...	Good water.
49	31	2½	3	3	825	Do. ..	Do. ...	Do.
50	30½	1½	½	2½	1010	Do. ...	Do. ...	Do.
51	32	3½	1	3½	825	Do. ..	Do. ...	Do.
52	33	3½	2	2	594	Do. ..	Do. ...	Half kucha.
53	30	4	2	3	649	Do. ...	Do. ...	Half pakka.
54	29	2¼	¼	3	600	Do. ...	Do. ...	Do.
55	35½	2	4	5	572	Do. ...	Adam	Good.
56	32	2	½	3	235	Do. ...	Kindall	Do.
57	30	1½	1½	2	100	Irrigation ...	Landi	Do.
58	29	2	0	2	230	House-hold purpose	Hazar Khan ...	Do.
59	31	1	0	2	90	Irrigation ...	Dhoorvir ...	Do.
60	45	9	6	9⅓	105	Do. ...	Kulan Kustura ...	Do.
61	38	4	1½	2⅓	70	Do. ...	Do. ...	Do.
62	46	10	7	6½	125	Do. ..	Koolaram ...	Do.
63	47	6	4	4½	77	Do. ...	Dunas Shet Bamand	Do.
64	43	6	4	8	250	Do. ...	Do. ...	Half pakka.

No. of well.	Depth in feet.	Depth of water.			Distance from the centre of the Lyaree in yards.	For what purpose used at present.	To whom it belongs.	Remarks.
		May.	June.	Septr.				
65	42	2	1	6	473	Irrigation ...	Sagriam Soortee ...	Half pakka.
66	44	4	2½	5	600	Do. ...	Hassanie ...	Do.
67	40	6	3	5¾	583	Do. ...	Do. ...	Pakka.
68	48	4	1½	3	620	Do. ...	Salgee	Do.
69	38	4	1	3½	610	Do. ...	Hazarkhan ...	Do.
70	25	3	½	3	730	Do. ...	Do. ...	Do.
71	35	2	½	4¾	1,030	Do ...	Oonda ...	Do.
72	30	4	0	2	1,230	Not used ...	Bazaar	Bad.
73	37	5	2	3	1,496	Drinking ...	Do.	Good.
74	41	1½	½	3¾	1,485	Commisariat ...	Government ...	Very good.
75	47	4	6	3	1,38)	Soldier Bazaar ...	Do.	Good.
76	42	2½	1	2¼	1,340	Irrigation ...	Not known ...	Do.
77	36	2½	1	2	1,220	Dooly bearer ..	Dooly bearers ..	Do.
78	27	6	1	4	1,480	Drinking ...	Chetoobux ...	Do.
79	25	4	3	1½	1,500	Commissariat ...	Government ...	Do.
80	29	5	1	2½	90	Irrigation ...	Jodashur ...	Not good.
81	25	6	3	4	364	Pottery... . .	Novand ...	Good.
82	26	6	4	4	90	Irrigation ...	Chandlal ...	Middling.
83	24	2	3	4	95	Do. ...	Do. ...	Do.
84	25	2	½	2	90	Do. ...	Gooroo Bhatia ...	Good.
85	35	4	1	3½	90	Do. ...	Tundier ...	Do.
86	35	2	1	3	860	Do. ...	Mookam ...	Middling.
87	36	4	2½	5	146	Do. ...	Ghoolam ...	Good.

(Sd.) J. R. MAUNSELL, CAPTAIN,
Executive Engineer.

No. 10/B OF 1866.

PUBLIC WORKS DEPARTMENT.

To

THE COMMISSIONER IN SIND.

SIR,

Adverting to the subject of the Kurrachee water-supply I have the honour to forward a paper with sketch by Mr. I. W. Barns on the obtaining of water by means of boring.

2. Lieutenant Merewether who at my request visited the spot selected by Mr. Barns, has informed me that there is something very remarkable in the formation and that he found water oozing at near twenty different places. This water is all brakish but the level of the ground is high and the circumstance is so singular in a part of the country where the rainfall is light and where there is so little surface material to absorb water excess in the beds of channels such as the Mulleer River, that I think it would be well worth while to have some deeper borings than those made up to the present time by Mr. Barns, and for this purpose I would recommend the employment of Mr. Barns who can be furnished with a proper boring apparatus which we now have at Kurrachee.

3. Mr. Barns' theory that the fresh water springs found at various places among the hills between Kurrachee and Sehwan, are fed from some distant source and that the stratum of limestone near or in which they are said to be found may be right. But even if wrong and what seems easier to understand, the fresh water is fed from some nearer source such as the bed of the Mulleer in the present instance, and that instead of finding its way along the stratum of lime stone rock it really finds its way along a stratum of sand or gravel immediately beneath, it would not deprive the scheme he advocates of its merit, and if really sweet water is obtained even in a small quantity it would atleast repay the cost of boring operations.

4. I would recommend Mr Barns employment on this special duty on a salary of Rs. 500 per month. The duty will occupy two or three months and the cost of the boring will probably not exceed rupees two thousand. Without the measure now recommended I do not think Mr. Barns will succeed as the operation of boring to a great depth requires more time and better instruments than he can give without aid from Government.

I have the honour to be,
Sir,
Your most obedient servant,

FIFE, LIEUT.-COLONEL,
Acting Chief Engineer in Sind.

Kurrachee, 9th January 1886.

NO. 11 OF 1866.

PUBLIC WORKS DEPARTMENT.

The Commissioner in Sind has the honour to submit the foregoing true copy of letter for the favourable consideration of Government.

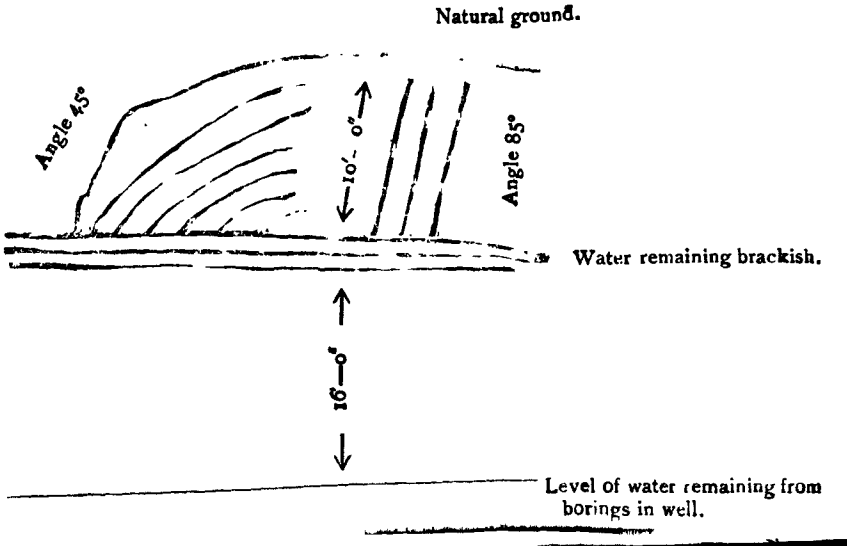
2. The Commissioner fully concurs with Colonel Fife that if really sweet water is obtained in carrying out the operations proposed the expenditure which will not exceed Rs. 3,500 will have been usefully employed.

S. MANSFIELD,
Commissioner in Sind.

Camp Larkana, 17th January 1866.

Result of operations as far as they have been extended.

Acting on the opinion formed in the latter part of my general observations, I commenced two such borings in a spot between 8 and 10 miles distant from Kurrachee as per accompanying map where water already appears on the surface here and there over an area of about 3 square miles. After penetrating the blue clay referred to, to a depth of 25 to 30 feet the first water bearing stratum of very fine light coloured silt is reached. This established the fact that water could be obtained and would flow over the surface over this area at least. I then commenced the work I have now in hand at a point where a small spring of brackish water was already flowing. I opened the spring head to a depth of 20 feet below the surface of the ground and at a depth of 10 feet led off the water by an open cutting to a point where it could flow over the surface of the ground. Within the well at the spring head I made 3 two inch borings—two being 20 feet and a third 35 feet below the top surface of the ground. The discharge from these is 5 cubic feet a minute and temperature of water 85° constant—the water as before observed is brackish being strongly impregnated which carbonic acid gas, and containing besides a large proportion of salts of soda, lime and iron. The stratification is here nearly horizontal. Four hundred feet north-west of this another boring of thirty feet from the top of the clay brought water to run out sixteen feet above the level of the water in the well at spring head just referred to—on opening a trench through the ground the strata here were shaped as follows:—



From the change in the direction of the strata and the far higher level the water stands at here than there, it is evident some great fault must exist in this interval of four-hundreds feet in length and it is at the above point where the stratification is so much distorted that I had resolved on for penetrating down through the clay to the underlying limestone. To facilitate operations I am driving an adit up from the well to this point so as to unwater to the depth of sixteen feet below where the water is now flowing; this of course I should excavate down to that level and then commence operations for sinking lower.

At about a mile north-west of this point brackish water is now running at a level of 44 feet above that in the well referred to. I have marked its position on the sketch map accompanying.

(Sd.) J. W. BARNS.

1st January 1866.

Notes on Mr. Barns' project for procuring water through artesian borings.

General observations.

The hills skirting the western side of the Indus Valley and thence to the confines of Persia seem to be of the same formation.

One characteristic of this is a bed of blue clay and fine silt with particles of mica both strongly saline; and as far as I have been able to judge where the strata is thrown up obliquely from 60 to 100 feet thick bands of sandstone from 1 to 3 inches thick at every 2½ to 3 feet are therein met with. Water seems generally to be found in this, but as a natural sequence it is brackish though useful for irrigation. The rock immediately above this seems generally to be a coarse coralline limestone. The strata on which the clay rests from its great depth is seldom visible. It may however be very distinctly traced at one place about 2½ miles from Muggur Peer on the right hand side of the Hub Road abreast of a tamarind tree which is 150 feet or so from the road on the left side or west—at this place the strata is thrown up at an angle 45°. Underneath the clay is a conglomerate composed of quartz gravel and sand from the size of a bean downwards in a matrice of iron sand and lime—next below this is a sparry limestone showing in some places petrified fungi, some as such as 1½ feet in diameter; at this particular spot this limestone is not of much thickness. In the Dhouk Valley above Sehwan it rises 1,500 feet high and between Muggur Peer and Kurrachee it would appear to be 300 or 400 feet high; it is in this limestone that all the springs of good water may seem to exist and it is cavernous. At hundreds of places in the hills water bursts out from the limestone in volumes, varying from 10 cubic feet a second, to the diminutive spring giving only a few gallons, per minute From the River Gaz northward many beautiful streams gush out from the limestone rock, swarming with fish and alligators but the water is generally lost within the hills within a few miles of its source. The Dhouk Valley between the Munchur Lake and the hills is bounded on the west by limestone mountain 1,500 feet high. In this is the spring called Peer Ghazee 3½ cubic feet per

second and a great number of others, in some places here the salt springs overlying those in the limestone may be traced as far as I recollect for some miles. At Muggur Peer the salt springs may be observed just after crossing the pass, but here as elsewhere the salt clay over-lying the limestone with the fresh water spring. The salt and fresh water springs again cross out in the Borunganee Valley about half way between Kurrachee and Muggur Peer.

At Mackee which is about 16 miles north-east of Kurrachee fresh and brackish water flow within a short distance of each other. Between Landhi and Wagodha many springs appear, some fresh, some brackish. As the brackish strata overlie the limestone formation it seems to me as a matter of course that where the strata are horizontal whatever water finds its way naturally through such impervious material as the clay formation must naturally be brackish and I look on the small springs which every here and there come to the surface rather as indices of the extent the water is diffused than as any criterion from which to judge of the quality at its parent source. As regards the quantity likely to be obtained by artificial borings it is a point that can duly be determined by experiment. In undertaking this however, it appears certain that wherever water already appears on the surface there will generally be found some fault which has caused it, and in such places it is therefore most advisable to search—at the point where I propose commencing boring the water running from an experimental boring is 16 feet above the level of its intended discharge, to start with such a known head is evidently a great advantage. My levels are not tied on to any line connected with Kurrachee, but Mr. Donaldson and myself estimate the level of the water now running from my experimental boring to be some 140 feet above mean sea level.

I.-M. W. Cantonments.
Supplying the Town of
Kurrachee with water.

No. 49-M.W./240 OF 1866.

PUBLIC WORKS DEPARTMENT.

Bombay Castle, 7th February 1866.

Letter from the Commissioner in Sind, No. 11, dated the 17th January 1866. Submits a project for supplying Kurrachee with water by means of boring, and recommends an expenditure of Rs. 3,500 in carrying out the operation proposed.

RESOLUTION.—Government have no objection to the Commissioner's proposal; the expenditure should however be sanctioned from the Reserve Fund which will be placed at Mr. Mansfield's disposal for the ensuing official year.

DOWDEN, Lieutenant, R.E.,
Under Secretary to Government.

To

THE COMMISSIONER IN SIND.

No. 314 OF 1866.

PUBLIC WORKS DEPARTMENT.

Forwarded to the Collector of Kurrachee and President of the Kurrachee Municipality.

By order,

J. MOORE,
Assistant Commissioner.

Camp Kumber, 20th February 1866.

To

L. MANSFIELD, ESQUIRE, I.C.S.,
COMMISSIONER IN SIND.

SIR,

Having had under consideration for a long period the question of the supplying of water to Kurrachee from the Hubb River, and having on the occasion of your last visit to that place explained to you the feasibility of the project I beg respectfully to solicit your permission to prepare and submit for your consideration plans and estimates in detail of the undertaking. The preparation of these documents will occupy about three months as not less than three lines may have to be surveyed to ascertain whether the water can best be brought in by a masonry aqueduct, or by pipes or by both.

2. I purpose to assume a daily supply of 20 lacs of gallons as the minimum delivery from the works.

3. Consequent upon the introduction of such a supply of water will arise the question of drainage for the Camp and the Town, and should these plans and estimates merit your approval I will then be prepared to submit for consideration similiar documents for drainage, sanitary improvement, utilization of sewage.

I have, etc.,

MOORADKHAN,

KHAN BAHADUR.

Kurrachee, 17th December 1866.

No. 2414 of 1866.

Dated 9th December 1866.

To

KHAN BAHADUR MOORADKHAN.

SIR,

In reply to your letter of the 17th instant I beg to inform you I shall have great pleasure in receving from you plans and estimates of any scheme likely to secure to the inhabitants of Kurrachee the inestimable benefit of a supply of good fresh water.

2. Colonel Fife, I believe, has under consideration a plan of procuring a supply of water from the Mulleer which is seven or eight miles nearer Kurrachee than the Hubb River. The scheme that ensures the best supply of water at the cheapest rate will of course be selected.

3. With reference to your 3rd paragraph. I would suggest that your attention be confined for the present solely to the supply of water. The other objects such as drainage, utilization of sewage, &c., may be left for future consideration.

I have, etc.,

J. MOORE,

for Commissioner in Sind.

No. 1391 of 1867.

General Department,
Dated, Kurrachee the 12th July 1867.

To

W. H. HAVELOCK, Esquire,
Acting Commissioner in Sind.

Sir,

I have the honour to forward copies of two letters from Khan Bahadur Mooradkhan containing a proposition, with his estimate of cost, for supplying Kurrachee with water by means of an aqueduct from his dam across the Hubb River to one Tree Tank, and an iron pipe from thence to the vicinity of the Runchore Lines.

2. The following table shows at one view all the schemes for supplying Kurrachee with water up to the present time which have been brought forward :—

	Designer.	Source.	Distance.	Estimated cost.	Quantity of water per day.	Quantity of water per head of 80,000 inhabitants.
			Miles.	Rs.	Gallons.	Gallons.
1.	Baker ...	Mulleer ...	13	1,86,760	32,170	4
2.	Hill	Do. ...	13	1,10,803	400,000	5
3.	Cantonment water Company.	Lyaree and wells.	at Kurrachee no details, a small supply.			
4.	Delisle ...	Mulleer ...	16	3,27,000	1,215,000	15·18
5.	Delisle with iron pipes.	...	...	10,00,000	...	...
6.	Brunton ...	...	23	20,00,000	2,050,000	25·69
7.	Newnham ...	Indus ...	100	90,00,000	12,000,000	150
8	Fife	Mulleer ...	10½	3,24,000	600,000	75
9.	Mooradkhan ...	Hubb ...	19	10,31,000	2,300,000	28·75
10	Mooradkhan revised by price.	...	...	16,00,000	...	...

3. From this table it will be apparent to you that the only schemes which offer a prospect of a sufficient supply of water, at a cost within the means of the inhabitants of Kurrachee, are those of Mr. Brunton and Mooradkhan. Those of Colonels Delisle and Fife may do so if enlarged, but at present we have much reason to doubt whether the Mulleer can give the quantity required, and the existence of this doubt has prevented Mr. Brunton's scheme from being passed forward. Enquiries are now about to be made which will set the question at rest; but whatever be the result, it is evident that the choice lies between the Mulleer and the Hubb. The quality of the water is much the same in both; but the latter, for the present at least, seems to offer the certainty of a larger supply inasmuch as it drains a much greater extent of country and even now gives Mooradkhan 10,000 gallons an hour without any perceptible diminution in its volume.

4. I may here mention that no detailed scheme for bringing water from the Hubb has until now been drawn up. Mr. Barnes, C.E., took a line of levels to it under the direction of the Water Supply Committee but considered the hills between it and Kurrachee to be an obstacle too great to be got over, and the Committee on his report gave up the idea of getting water from that direction altogether. Mooradkhan and his Manager, Mr. Mathieson, have since discovered the lines by which they propose to bring in the water, lines which Mr. Barnes' survey did not approach.

5. I am sorry that the difficulty I have felt in dealing with Mooradkhan's proposition and in making some specific recommendation regarding it has caused delay in its submission to the Municipality and to Government. In my difficulty I sought the advice of Mr. Price, C.E., the Superintendent of Harbour Works, and Captain Merewether his assistant, who are admitted to be amongst the best and most careful Engineers in the service of Government, both of whom have favoured me with most valuable memoranda on the subject. Captain Merewether's opinions, so far as he has given them coincide with Mr. Price's; and as the latter gentleman's memorandum is the more complete and treats of matters not touched

on by Captain Merewether.* I here with submit a copy of it. I must here express my thanks to both the gentlemen named for their valuable aid.

6. Since receiving the memoranda above mentioned I have again seen and consulted with both Mooradkhan and Mr. Price. These interviews led to my making certain propositions to the Managing Committee at last Tuesday's meeting and to the passing of the following Resolution by that body, *viz*:—

> "That the question of the construction of the aqueduct from the Hubb to Kurrachee be reserved for later consideration but that in the meantime the Commissioner be asked to request Government to appoint an Engineer whose duty it shall be to draw up a plan for the Hubb Dam for Mooradkhan, to carry out under his superintendence to make full investigation of the quantity of water obtainable and to go over the levels of the lines proposed for the aqueduct, and of any other lines that may seem to offer preferential advantages and generally to revise the estimate, the Municipality undertaking to pay such remuneration to the person employed as Government may consider necessary."

7. I will here state as briefly as I can the reasons which led the Managing Committee to pass this Resolution. You will observe that Mr. Price strongly recommends that the Municipality should itself undertake the whole of the works required for water-supply, and points out certain advantages which may without doubt be thereby secured. Against these advantages must be set the risk of failure of the works, or in the supply of water-risks which however will be reduced to a minimum if the investigation which he proposes be made before hand by a competent Engineer.

8. Mr. Price's suggestion regarding the aqueduct is most worthy of consideration but it would, in my opinion and in that of the members of the Managing Committee, be impossible to take the dam out of Mooradkhan's hands. The control of

the Hubb water is all that makes his Hubb estates valuable, and everything short of conveying to him the fee simple or the lease of the river bed has been done to secure him such control. An arrangement has even been made for him, settling how much shall be paid to him for such water as may be used by the cultivators of Bela, a foreign territory beyond the river. Interference with him now, after he has spent lacs of rupees on his land and engines and in endeavours to build a dam and in plant to enable him to restore the latter or build another, would be in the highest degree unjust. Practically it would amount to confiscation of his property.

9. These circumstances being considered, our first idea was to allow him to complete his dam and if it held the supply of water upon which he calculated, to then consider whether we should close with his offer to bring the latter to Kurrachee, or should buy it from him at the dam, and bring it in ourselves; and this is all that need have been done had the plan for the dam been drawn up by a competent professional Engineer. The designer, however, was Mr. Mathieson, Mooradkhan's Superintendent, a very intelligent man but with only a slight knowledge of Engineering Science. I am acquainted generally with his plans and I have had great doubts as to whether the openings which he meant to leave in the dam would suffice to prevent the silting of the reservoir above it, a point on which Mr. Price lays considerable stress. Indeed it would seem from Mooradkhan's first letter as if Mr. Mathieson reckoned on the reservoir silting up but did not consider that much of an evil.

10. On mentioning my doubts to Mooradkhan, he said that he himself wished for nothing so much as the assistance of a competent Engineer to superintend his works and put him in the way of doing it properly. He thought a visit two or three times a month by some Government Engineer from Kurrachee would suffice, for whose transport, he, having plenty of carriages and horses, would provide and he said he would be too glad to follow all his directions. Mr. Mathieson who is perfectly competent would superintend the work and see it properly carried out. Mooradkhan's idea was evidenly to work without a regular plan and estimate, but to carry out such directions as he might receive from time to time from the Engineer.

11. On again consulting Mr. Price however, it became clear to me that the plan for the dam required to be entirely redesigned in order to render it successful, as unless numerous openings be left in it the reservoir will certainly silt up. There are almost insuperable difficulties in the way of Mooradkhan, himself getting a person fully qualified for such work, whilst any one employed on it will have ample time to revise the aqueduct plans, to make out plans and estimates for the distribution mains and will be able to ascertain the quantity of water that may be expected long before the completion of the dam. As it is all but certain that this quantity will exceed the minimum supply of 23 lacs of gallons proposed by Mooradkhan; it seems to me that it is well worth while for the Municipality to spend 5 to 7,000 rupees out of its funds in an effort to prevent the failure of such a very promising scheme, even if those efforts should ultimately fail. The sum I have mentioned is what Mr. Price roughly estimates as the cost of designing the dam, giving a little superintendence during its construction, revising plans and estimates of the aqueduct and making plans and estimates of distributing mains; and I consider that the risk of losing such a small amount to be nothing compared to the advantages which we may hope to secure by expending it.

12. Such are the reasons which induced me to recommend the Managing Committee of the Municipality to employ an Engineer, and induced that body to adopt the Resolution quoted in my second paragraph in the propriety of which I hope you will concur. The Managing Committee have passed a second Resolution which I give in the *margin asking Mooradkhan to bind himself to follow the Engineer's plans. I have no doubt that he will agree to this, but it will be necessary to word the agreement so that he will clearly understand that the Municipality is in no way bound to him by the assistance which it offers. I will see to this when informing him of the Resolution.

*That a copy of the foregoing Resolution be communicated to Khan Bahadur Murad Khan and that he be requested to state if he is prepared to enter into an agreement with the Karachi Municipality to construct his dam at the Hubb according to the design and under the supervision of the Engineer who may be appointed by Government to that duty.

13. It may be here asked why, if the Municipality were ready to pay all the expenses of the investigation proposed, should it not at once engage an Engineer to make them, instead of applying to Government to appoint one? and this brings me to the subject of the doubts expressed by Mr. Price as to Mooradkhan's ability to carry out his scheme without some assistance in money from the Municipality. I have made particular enquiries from him on this point, and he has been most frank and open in his replies. He expresses his fixed determination to complete his dam under any circumstances, and wants no assistance towards it. He has a Locomotive just out from England, now being put together at the Railway Workshops; he has for some time had two or three engines for working pumps and has several miles of rail ready to lay down to carry the stone for the dam. He intends to commence work immeditaley after the August rains and hopes to complete the dam by next February. I have no doubt he will do as he says.

14. But as regards the aqueduct he says that if his offer is accepted he will require an advance of six lacs of rupees during the progress of the work, (the latter to be always in advance of the former), to be repaid by instalments out of such annual rental as the Municipality may agree to pay him for the water. The Municipality will certainly require the aid of Government to raise either the six lacs wanted by Mooradkhan, or the entire amount required to carry out the works on its own account, and it will also look to Government to pay a portion either of the latter or of Mooradkhan's rental, as the case may be. It would therefore be utterly useless for it to enter upon the investigation of this or any other scheme unless assured of the co-operation and aid of Government in case the result of those investigations should prove favourable.

15. It remains for me to say a few words on another important branch of the subject, *viz.*, the ability of the inhabitants of Kurrachee, even with the assistance of Government to meet the taxation necessary to secure a sufficient supply of water. On this point I beg to quote the following extract from the Municipal Budget Report for 1865-66, having reference to

a scheme submitted by Messrs. Grimes and Newnham for bringing water to Kurrachee from the Indus :—

> "a guarantee of two lacs per annum is asked for from the Municipality. We are not yet clear as to how such a sum can be raised at present, but beg to lay the following figures before you. We have no trustworthy returns of houses, but if we take the population at 60,000 which is the lowest estimate, or at 1,00,000 which the highest, and take the usual estimate of four persons to each house, we would have 15,000 and 25,000 as the number of houses respectively and the former is the number given by Mr. Naomull our most experienced member. Taking the houses at 15,000 the annual charge would be rupees 13·333 per house, and taking them at 25,000 the charge would be only rupees 8. As however Government would most probably contribute 50,000 rupees of the two lacs required, the charge per house would be reduced to rupees 10 or rupees 6 according to the number. We are inclined to think that the Municipality might safely give the guarantee asked for, and impose a house rate to meet it."

16. These words are now equally applicable. We can see pretty clearly that a tax may be raised. The impost per house may be even less than that stated in the foregoing extract, for we can sell large quantities of water profitably at Keamari; but nevertheless I look upon the raising of even one lac of rupees per annum, in addition to our present Municipal taxation, as an impossibility, until the Municipal body is reconstituted and strengthened by the introduction into it of a few independent European merchants and other men of some education and enlightenment, having influence in the town. It is true that I could even now carry a resolution at a Municipal meeting for the imposition of a tax, but the native Sindhi members would vote unanimously against it; they are dead against any house tax, and are insensible of the want of good water; and then opposition out of doors would be so strong that I could not venture unsupported to act in opposition to it. The Act, a draft of which was long since submitted to Government, supplies all that is necessary and its introduction is so much wanted on other grounds that I trust the passing of it or of some modification of it, will not be much longer delayed.

17. I will now just sum up the chief features and advantages of Mooradkhan's scheme:—

1st—The distance the water has to be carried is 100,712 feet equal to 19 miles.

2nd—of this 47,269 feet are in cutting.
17,660 feet on raised duct.
14,611 feet in tunnel.
21,172 feet in iron pipe.

3rd—Mooradkhan's estimate is Rs. 10,31,400.

4th—Raised by Mr. Price to Rs. 16,00,000.

5th—For which the minimum supply of water is to be 23 lacs of gallons per diem, being 20 gallons per head for 100,000 inhabitants, or 30 gallons for 60,000 with three lacs to spare for roads, gardens, etc.

6th—Mooradkhan adding to his estimate Rs. 1,20,000.

7th—Proposes to make the works capable of supplying 60 lacs of gallons.

8th—It is nearly certain that 23 lacs can be supplied, but there is no certainty that much more would be forthcoming.

9th—Mooradkhan asks 2,00,000 rupees per annum, for 23 lacs of gallons per day.

10th—Reduced by Mr. Price if the Municipality undertake the whole work to Rs. 1,50,000.

11th—Two lacs per annum for 23 lacs of gallons per day = 3 annas 9·7 pies per 1,000 gallons.

12th—For all over 23 lacs, Mooradkhan proposes to charge 2 annas per 1,000 gallons.

13th—Mr. Price calculates that an addition of 1 anna to the former rate will pay for all the distributing mains, stopcocks, stand pipes, etc., thus bringing

water along every main street for say 5 annas per 1,000 gallons. If to this we add 11 annas it will cover or more than cover the charge per house service making it up to one rupee per 1,000 gallons.

14th—The Municipality now charges the Harbour works 5 annas per 100 gallons = Rs. 3-2-0 per 1,000 gallons for water delivered at their workshop through pipes from Rambagh tank.

15th—My own water delivered by Bheesty costs me Rs. 2-15-2 per 1,000 gallons and costs many very much more.

16th—The ordinary charge in the Saddar Bazaar is Rs. 2 per month for one pakhal per day, which equals a rate of Rs. 2-7-0 per 1,000 gallons.

17th—The cost therefore of fairly good water from the Hubb delivered in every house will be a good deal less than half what we at present pay for bad Kurrachee water.

18th—In conclusion I must apologise for the length of this letter caused by my fear of omitting anything material to a subject of such vast importance to the town of Kurrachee.

I have, etc.,

W. R. LAMBERT,

Magistrate and President,
Kurrachee Municipality.

To

THE COMMISSIONER IN SIND,
Kurrachee.

SIR,

I have the honour to submit for your consideration the result of the surveys I have undertaken in accordance with your letter No. 2414, dated 19th December last, with the view of providing a supply of good fresh water for Kurracheë.

2. The plans accompanying this report are as follows:—

No. 1.—Sketch map of the country between the Hubb River and Kurrachee, showing the surveys made and the course of the proposed aqueduct from the dam on the river to a central point at Kurrachee.

No. 2.—Section of the course of the proposed aqueduct.

No. 3.—Plan of the basin which will be formed by the construction of the dam across the Hubb River, with sections of basin.

No. 4.—Plan and section of filtering well, plan and section of distributing reservoir, sections of measuring tanks, aqueduct, tunnels, etc.

3. The River Hubb is stated to have its source in the range of hills adjoining Khelat, it flows through an uncultivated and thinly inhabited country, the water appears pure and sweet. I have used it with an engine for pumping water for irrigation for about two years and the incrustration in the boiler does not indicate the presence of salt. In December last I forwarded to Bombay for chemical analysis two bottles of the Hubb water, but the result of the analysis shows a considerable proportion of salt. On enquiry I find that the water sent was taken not from the pool at the foot of the pumps but from a hole in the sandy bed where it is possible some saline impurities may have been deposited. At that time the river was very low, only a small stream from pool to pool. I am now

preparing to send to Bombay for further test other samples taken from different portions of the river both at and above the dam, and from pools as well as from the stream itself with the view of ascertaining the source of the saline impurities. The result of this investigation shall be duly communicated to you.

4. The freshets in this river are independent of any rainfall in the neighbourhood of Kurrachee and occur usually about the months of January, March and July from rain in the Baluchistan hills. The depth of these floods is from eight to twenty-five feet but they rapidly subside owing to the great slope of the river bed nearly six and half feet per mile. On the dam being completed the water will stand back nearly three miles and a half giving an area of 281 acres and contents of 12,90,17,272 cubic feet or 80,63,57,950 gallons. The water will be taken from the river at seven feet below the crest of the dam, this depth of the entire basin gives 7,63,83,772 cubic feet or gallons 47,73,98,575 equal to nearly seven months comsumption, irrespective of the current which as the lacs of gallons daily are pumped from the river bed at present without any dam or without any sensible diminution of the current below the engine house may be expected to keep the water nearly up to the crest of the dam during the hot months or until the occurrence of the next freshet. It may be urged that the portion immediately above the dam will shortly silt up, but this deposit being sand will contain a large proportion of water and to provide against any deficiency arising from silting of the basin, the dam will be fitted with top sluices to retain an additional four feet of water by closing them after each freshet; this arrangement appears preferable to erecting on each occasion a temporary wall as is done at Poona and elsewhere after the monsoon.

5. During the freshets and for some days afterwards the water is charged with suspended matters. The Basin will however operate as a settling reservoir, leaving only a filter to be provided. A modified arrangement of the system in use at the 'Vehar' lake will probably best meet the requirements of this supply; it consists of a filtering well or tower 30 feet interior diameter built at the inner foot of the dam, its height

to be over the highest flood level or about 30 feet from the plinth of the dam, to have double walls four feet apart, three feet thick at bottom and two at top and built of accurately fitted blocks of a permeable sand stone or littoral concrete having courses of hard stone at every ten feet. The space between the walls to be filled with fine sand or grounded rock, thus securing a filtering medium of eight feet. The water will pass from this well to the aqueduct through a masonry channel in which will be inserted a gauge to admit the exact quantity agreed upon, the excess caused by pressure from the rising of the river will be adjusted by measuring tanks placed at intervals beyond the influence of the highest floods. These tanks to be fitted with self acting gauges and waste weirs to convey surplus water back to the river in the event of the sluices becoming deranged.

6. By careful survey the bench mark at the sluices was ascertained to be 89·66 feet above the Railway Datum at Trinity Church; I therefore sought for a line which at a minimum cost and of the shortest length would have a uniform fall of two feet per mile and a head from the distributing reservoir of about sixty feet above the top step of Trinity Church. The line selected fulfils these conditions and I will now describe it.

7. From the dam the aqueduct will be in cutting for nearly three miles, and to cross the low land at the base of the range of hills bounding my estate it will be elevated on a basement well footed into the soil. The spoil from this foundation will revet the basement and on the aqueduct being crested I will be prepared to embank this portion so as to form a bund with suitable sluices for irrigation. A short tunnel of about 600 feet will clear this range of hills, the rock here is firm and compact and only masonry flooring appears to be requisite. The aqueduct will then cross some low land in the 'Mahie garee' plain, again supported on a basement and from thence in cutting to the second tunnel through the range of hills beyond the Moach plain near the Dharamsala. This tunnel will be about 14,000 feet long and from the soft nature of the rock will be the most expensive portion of the line, the tunnel requiring to be lined with masonry throughout; from the mouth of this tunnel to the distributing reservoir the aqueduct will be within soil.

8. I have designed the distributing reservoir to contain nearly three days supply to be covered over and to be twenty feet in depth, from the silt of the aqueduct which latter will be 59·53 feet above the top step of Trintiy Church. From this reservoir to a point near Ranchore Lines the water will be conveyed by a 24-inch pipe thus securing a head of sixty feet while the distributing reservoir is full.

9. The area of the aqueduct is a question deserving the most serious attention, as were it constructed simply to meet present wants its adaptation to the wants of a more extensive population would be impracticable except at a very heavy outlay; I have therefore designed it to have a breadth of two feet and a height of four feet interior measurement, with a flat top of covering slabs excepting places where the weight of the earth above appears to require an arched top. This aqueduct when running about one foot and a half in depth will give a velocity of nearly 85 feet per minute and a discharge of 254 cubic feet per minute equal to 23,00,000 gallons per day a quantity probably sufficient for present requirements and for future wants, if running at about three feet in depth will have a velocity of nearly 95 feet per minute and a discharge of 570 cubic feet per minute or per day 50,00,000 gallons. I consider that to reduce the above dimensions either in depth or height would most materially affect its utility and even the saving thereby would be trifling when compared to the advantage of being at all times able to clean and inspect it. On the other hand looking to the prospective wants it might be desirable to increase the width from two to two and a half feet.

10. The distributing reservoir is situated on rocky soil and could readily be extended as circumstances may require. A waste weir should be added to it at the height of the mean level of the water in the aqueduct with a trench to the One-tree tank into which all water surplus from the gauge at the entrance should pass so as to prevent the water in the aqueduct from being dammed up.

11. The diameter of the pipe to convey the water from the distributing reservoir to Kurrachee, I have fixed at 24 inches,

as giving a discharge with only one foot water in the reservoir of 50,00,000 gallons per day and with the reservoir full of 60,00,000 per day. I consider it absolutely necessary that ample provision should be made at the outset as hitherto the supply of water having been limited the actual quantity which will be required can only be really ascertained when the water-supply is impracticable operation.

12. Figures 1 to 10 show the proposed proportions of the filtering well, aqueduct, tunnel, shafts, air shafts, etc. Air shafts are provided for the purposes of ventilation and cleaning at distances of 1,000 feet, and tunnel shafts at every two hundred feet to facilitate the works of excavation and construction ; under each air shaft is placed a silt well to intercept all solid matter that may enter the aqueduct. The rates for masonry and excavation are such as I am prepared to perform the works for the cost of the pipe portion. I have inserted according to Mr. Brunton's estimate.

13. I beg to append a detailed estimate of the entire cost of the project Rs. 10,31442-13-6 amounting to rupees ten lakhs thirty-one thousand four hundred and forty-two, annas thirteen, pies six, which is irrespective of the cost of the dam or the distribution over Kurrachee. I have confined myself to this limit as the works to this extent can without difficulty be constructed and maintained by private enterprise, the water to be paid for by the Municipal administration at a certain rate, but the distribution of the water over Kurrachee both as regards cost and maintenance of the works and the collection of rates will no doubt be undertaken and carried out by the Municipal Administration.

14. Respecting the quantity of water to be supplied per day, I have assumed the minimum to be 23,00,000 believing as stated in para. 11 and as found in analogous cases that on the works being opened the very facility of the supply will increase the demand and consumption. And as a drainage scheme will doubtless follow the introduction of a water-supply it may be expected that the minimum daily supply will then reach about 50 lakhs gallons. The pipe from the distributing reservoir as now estimated for will give from fifty to sixty lakhs

of gallons daily, and the width of the aqueduct might in the first instance be increased from two to two and a half feet to give a corresponding discharge, while the reservoir at the Hubb would admit of this quantity being drawn off by simply increasing the height of the dam about four feet. I therefore beg to submit this scheme for your favourable consideration trusting that it will be found to afford an adequate supply of good fresh water at a minimum cost.

I have, etc.,

(Sd.) MOORADKHAN,
Khan Bahadoor.

Kurrachee, 27th April 1867.

Estimate of the probable expense of bringing a supply of water from the Hubb River to a central point in Kurrachee.

Distances.	Description.	No.	Length.	Breadth.	Depth.	Cubic feet.
500	Excavation from dam to embankment...	1	500	5	7	17,500
600	Do. do. ...	1	600	5	15·5	46,500
400	Do. do. ...	1	400	5	18·5	36,500
600	Do. do. ...	1	600	5	19·5	58,500
600	Do. do. ...	1	600	5	18	54,000
1,800	Do. do. ..	1	1,800	5	14	1,26,000
2,400	Do. do. ...	1	2,400	5	12	1,44,000
2,400	Do. do. ...	1	2,400	5	11	1,32,000
2,400	Do. do. ..	1	2,400	5	7	84,000
2,400	Do. do. ...	1	2 400	5	4	48,000
2,400	Do. do. ...	1	2,400	5	3	36,000
16,500	Total ...	...	...	...	...	7,83,000
	Morum ...	...	...	...	...	78,300
	Earth ...	...	...	...	...	7,04,700
10,060	Excavating foundation for basement of aqueduct over low ground.	1	10,060	5	4	2,01,200
	Earth ..	...	...	...	...	2,01,200
169	Excavation at mouth of first tunnel ...	1	169	5	16	13,520
	Rock ..	...	...	...	...	13,520
611	Excavating first tunnel	1	611	22·28	16	13,613
	Rock ...	...	...	...	...	13,613
1,000	Excavation at end of tunnel ...	1	1,000	5	18	90,000
	Earth ...	...	...	...	...	30,000
	Rock ...	...	...	...	...	60,000
7,600	Excavation foundation for basement of aqueduct over low ground.	1	7,600	5	4	1,52,000
	Earth ..	...	...	...	...	1,52,000

Distances.	Description.	No.	Length.	Breadth.	Depth.	Cubic feet.
1,800	Excavation to mouth of second tunnel.	1	1,800	5	7	63,000
2,400	Do. do. ...	1	2,400	5	14	1,68,000
1,200	Do. do. ...	1	1,200	5	7	42,000
1,200	Do. do. ...	1	1,200	5	15	90,000
2,400	Do. do. ...	1	2,400	5	25	3,00,000
2,400	Do. do. ...	1	2,400	5	29	3,48,000
1,800	Do. do. ...	1	1,800	5	38	3,42,000
13,200	Total ...					13,53,000
	Earth ...	...	...	...	...	4,51,000
	Morum ...	...	...	...	...	4,51,000
	Rock ...	...	...	...	...	4,51,000
14,000	Excavating second tunnel ...	1	14,000	50·71	38	7,09,940
	Rock ...	...	...	...	...	7,09,940
	Excavating 69 shafts in length of tunnel running feet	...	4,966	50·26	...	2,49,591
	Morum ...	...	...	...	...	62,398
	Rock ...	...	...	...	...	1,87,193
1,800	Excavation on to Distributing reservoir.	1	1,800	40	5	3,60,000
600	Do. do. ...	1	600	33	5	99,000
2,400	Do. do.	1	2,400	30	5	3,60,000
2,600	Do. do. ..	1	2,600	20	5	2,60,000
3,200	Do. do. ..	1	3,200	17	5	2,72,000
4,000	Do. do. ...	1	4,000	18	5	3,60,000
200	Do. do. ...	1	200	13	5	13,000
1,600	Do. do. ...	1	1,600	7	5	56,000
16,400						
	Earth ...	...	...	...	...	4,45,000
	Morum ...	...	...	...	...	6,67,500
	Rock ...	...	...	...	...	6,67,500

Distances.	Description.	No.	Length.	Breadth.	Depth.	Qubic feet.
200	Excavating Distributing Reservoir ...	1	206	106	25	5,45,900
	Morum ...	...	...	...	...	1,36,475
	Rock ...	...	...	...	...	4,09,425
3,200	Excavating Trench for Pipes ...	1	3,200	4	19	2,43,200
972	Do. do. ...	1	972	4	13	50,544
1,400	Do. do. ...	1	1,400	4	13	72,800
4,600	Do. do. ...	1	4,600	4	8	1,47,200
1,600	Do. do. ..	1	1,600	4	7	44,800
5,600	Do. do. ...	1	5,600	4	6	1.34,400
1,200	Do. do. ...	1	1,200	4	8	38,400
200	Do. do. ...	1	200	4	8	6,400
800	Do. do. ...	1	800	4	7	22,400
1,600	Do. do. ...	1	1,600	4	8	51,200
21,172						8,11,344
	Earth ...	...	...	...	...	5,61,344
	Morum ..	...	...	...	...	1 25,000
	Rock ...	...	...	...	...	1,25,000
	Masonry commencing from dam, filtering well inside dam, Interior diameter 30 ft., double walls with four feet of sand or pounded rock (amygdaloid) between them, Foundation 11 feet wide.	1	...	578·78	3	1,736
	Inner wall 30 feet high	1	...	122·71	30	3,681
	Outer do. do.	1	...	148·19	30	4,445
	Sand, etc.	1	...	216·77	30	6,503
	Coursed rubble in foundation ...	...	...	...	...	1,736
	Annimar best in walls	...	...	...	...	8,126
	Sand, etc.	...	...	...	...	6,503
	Measuring tank fitted with self acting, sluices, water gauges, etc.					
	Bottoms ...	2	20	20	2	1,600
	Sides ...	4	19	10	2	760
	Ends ...	4	15	10	2	600
	Sluices, &c. ...	...	...	...	...	...
	Annimar best in two tanks	...	...	...	...	2,960
	Sluices water gauges, etc.	...	...	...	..	...

Distances.	Description.	No.	Length.	Breadth.	Depth.	Qubic feet.
26,560	Aqueduct according to figure 7 from measuring tanks to 169 feet from mouth of first tunnel.	1	26,560	20'75	...	5,51,120
	Air shafts 1,000 feet apart figuring No. 9 running feet.	...	166	2,400	...	3,984
	Salt walls at bottoms of each airshaft figure No. 8.	26	...	154'50	...	4,017
						5,59,121
	Coursed rubble	...	...	...	...	5,59,121
	Basement of aqueduct over low ground,	1	1,000	5	4'50	22,500
	Do. do. ...	1	1,000	5	5'50	27,500
	Do. do. ...	1	1,000	5	6'50	32,500
	Do. do. ...	1	1,000	5	7 00	35,000
	Do. do. ...	1	1,000	5	7'00	35,000
	Do. do. ..	1	1,000	5	7'50	37,500
	Do. do. ...	1	1,000	5	8'50	42,500
	Do. do. ...	1	1,000	5	10'00	50,000
	Do. do. ..	1	1,000	5	11'00	55,000
	Do. do. ..	1	1,000	5	10'00	50,000
						3,87,500
10,000	Rough rubble	...	...	...	...	3,87,500
169	To mouth of tunnel, Arched section figure No. 6,	1	161	25	...	4,225
	Air shaft at mouth, running feet ...	1	30	24	...	720
	Arched section, coursed rubble ...	...	...	...	...	4,225
	Coursed rubble	...	..	...	...	720
611	Tunnel, flooring only estimated for, the rock appearing to be solid.	1	611	4	1'5	3,666
	Coursed rubble	...	...	...	...	3,666
600	From mouth of tunnel arched section, figure 6.	1	600	25	...	15,000
	Air shaft at mouth, running feet ...	1	34	24	...	720
	Arched section, coursed rubble ...	...	..	...	...	15,000
	Coursed rubble	...	...	...	...	720

Distances.	Description.	No.	Length.	Breadth.	Depth.	Cubic feet.
14,600	Flat section figure 7 or to 6,600 ft. from mouth of second tunnel.	1	14,600	20·75	4	3,02,950
	Basement of aqueduct over low ground	1	1,000	5	4	20,000
		1	1,000	5	8	40,000
		1	1,000	5	9	45,000
		1	1,000	5	7	35,000
		1	1,000	5	5	25,000
		1	1,000	5	5	25,000
		1	1,000	5	3	15,000
		1	600	5	2	6,000
						2,11,000
6,600	Arched section figure 6 to mouth of second tunnel.	1	6,600	25	2	1,65,000
	Air shafts, running feet	1	271	24	...	6,504
	Silt wells	...	23	154·50	...	3,553
	Flat section coursed rubble	...	...	...	...	3,13,007
	Arched section coursed rubble ...	...	...	...	...	1,65,000
	Basement, rough rubble	...	...	...	...	2,11,080
14,000	Tunnel section figure 4	1	14,000	28·12	2	3,93,680
	Shafts, running feet	1	4,966	30·63	...	1,52,108
	Arched Section in tunnel coursed rubble.	...	...	...	...	3,93,680
	Arched section shafts, coursed rubble ...	...	...	...	...	1,52,108
5,600	Aqueduct arched section	1	5,600	25	2	1,40,000
	Air Shafts, running feet	1	192	24	2	4,608
	Silt wells	...	6	154·50	2	927
	Arched section, coursed rubble ...	...	...	...	...	1,40,000
	Flat section, coursed rubble ...	...	...	...	...	5,535
10,800	Flat section on to Distributing Reservoir	1	10,800	20·75	8	2,24,100
	Air shafts, running feet	1	141	24	2	3,884
	Silt wells	10	141	154·50	2	1,545
	Flat section, coursed rubble ...	...	...	...		2,29,029
	Distributary Reservoir—					
	Bottoms	1	206	106	2·5	54,840
	Sides	2	206	24	2·5	24,720
	Ends	2	100	24	2·5	12,000
	Pillars to support roof	38	24	2·5	2·5	5,700

Distances.	Description.	No.	Length.	Breadth.	Depth.	Cubic feet.
	Roofing square feet	1	206	120	2'5	24,720
	Emission pipe and valves	...	...	...	...	97,260
	Coursed rubble ...	...	...	...	...	97,260
	Roofing square feet ...	...	...	...	...	24,720
	Emission Pipes and Valves	...	...	...	...	..
	Conduct pipe 24 inches diameter thickness of metal 1 inch average.	...	...	...	...	...
21 172	Weight of 1 foot in length 245·2 lbs. ...	1	Feet. 21,172	120	2'5	Tons. 3,315
	Cost as delivered at Keamari ...	...	...	...	...	...
	Cost of delivering along side tench ...	...	...	...	...	...
	Cost of laying ...	...	...	...	...	...

ABSTRACT.

Quantity.	Description.	Rate.	Per	Amount.	Total.
C. feet		Rs. a. p.	C.ft.	Rs. a. p.	Rs. a. p.
	Excavating trench for aqueduct first portion—				
7,04,700	Earth	1 0 0	100	7,047 0 0	
78,300	Morum	1 8 0	100	1,174 8 0	8,221 8 0
	Excavating foundations for basement first portion—				
2 01,200	Earth	1 0 0	100	2,012 0 0	2,012 0 0
	Excavating for first arched portion—				
13,520	Rock	3 8 0	100	473 3 2	473 3 2
	Excavating first tunnel—				
13,613	Rock	8 0 0	100	1,089 0 7	1,089 0 7
	Excavating for second arched portion—				
30,000	Earth	1 0 0	100	300 0 0	
60,000	Rock	3 8 0	100	2,100 0 0	2,400 0 0
	Excavating foundation for basement second portion—				
1,52,000	Earth	1 0 0	100	1,520 0 0	1,520 0 0
	Excavating trench for aqueduct up to second tunnel—				
4,51,000	Earth	1 0 0	100	4,510 0 0	
4,51,000	Morum	1 8 0	100	6,765 0 0	
4,51,000	Rock	3 8 0	100	15,785 0 0	27,060 0 0
	Excavating second tunnel—				
7,09,940	Rock	8 0 0	100	56,795 3 2	56,795 3 2
	Excavating shafts for tunnels—				
2,49,591	Morum and rock	4 0 0	100	9,983 10 2	9,983 10 2
	Excavating trench for aqueduct on to Reservoir—				
4,45,000	Earth	1 0 0	100	4,450 0 0	
6,67,500	Morum	1 8 0	100	10,012 8 0	
6,67,500	Rock	3 8 0	100	23,362 8 0	37,825 0 0
	Excavating Distributing Reservoir—				
1,36,475	Morum	1 8 0	100	2,047 2 0	
4,09,425	Rock	3 8 0	100	14,329 14 0	16,377 0 0
	Excavating trench for pipe—				
5,61,344	Earth	1 0 0	100	5,613 7 0	
1,25,000	Morum	1 0 0	100	1,875 0 0	
1,25,000	Rock	3 8 0	100	4,375 0 0	11,863 7 0

Quantity.	Description.	Rate.	Per	Amount.	Total.
C. feet		Rs. a. p.	C.ft.	Rs. a. p.	Rs. a. p.
	Masonry in filtering wells—				
1,736	Coursed rubble	60 0 0	100	1,041 9 7	
8,126	Annimar best	85 0 0	100	6 907 1 7	
6.503	Sand, etc.	20 0 0	100	1,300 9 6	
	Conveyance of filtering stone from Bombay..	...	..	2,000 0 0	
	Connecting well with dam measuring tanks	. .	..	2,664 11 4	13,914 0 0
2,960	Annimar best	45 0 0	100	1,332 0 0	
	Sluices, gauges, etc.	...	...	1,606 0 0	2,932 0 0
	Aqueduct as per section figure 7—				
5,59,121	Coursed rubble	20 0 0	100	1,11,824 3 2	1,11 824 3 2
	Basement of aqueduct first portion—				
3,87,500	Rough rubble	15 0 0	100	58,125 0 0	58,125 0 0
	Aqueduct as per section figure 6—				
4,225	Arched coursed rubble	25 0 0	100	1,056 4 0	
720	Do.	20 0 0	100	144 0 0	1,200 4 0
	Tunnel flooring only—				
3,666	Coursed rubble	20 0 0	100	733 3 2	733 3 2
	Adqueduct as per section figure 6—				
15,000	Coursed rubble	25 0 0	100	3,750 0 0	
720	Do.	20 0 0	100	144 0 0	3,894 0 0
	Aqueduct as per section figure 7 —				
3,02,950	Flat top coursed rubble	20 0 0	100	60,590 0 0	
4,11,000	Basement rough rubble	15 0 0	100	31,650 0 0	92,240 0 0
	Arched section as per figure 6—				
1,65,000	Coursed rubble	25 0 0	100	41,250 0 0	
10,057	Do.	20 0 0	100	2,011 6 4	43,261 6 4
	Tunnel section as per figure 4—				
3,93,680	Coursed rubble	25 0 0	100	38,027 0 0	1,36 447 0 0
	Aqueduct arched section as per figure 6—				
1,40,000	Coursed rubble	25 0 0	100	35,000 0 0	
5,535	Do.	20 0 0	100	1,107 0 0	36,107 0 0

Quantity.	Description.	Rate.	Per	Amount.	Total.
C. feet	Aqueduct flat section—	Rs. a. p.	C.ft.	Rs. a. p.	Rs. a. p.
2,29.029	Coursed rubble	20 0 0	100	45 805 12 9	45,805 12 9
	Distributing Reservoir—				
97,260	Coursed rubble	35 0 0	100	34,041 0 0	
	Roofing per 100 Sq. ft.	80 0 0	Sq.ft.	19,776 0 0	
	Emission pipe, valve, etc.	...		800 0 0	54,617 0 0
2,318	Conduct pipe	80 0 0	1 ton	1,85,040 0 0	
	Delivery along side trench	0 8 0	Ton per mile.	2,891 0 0	
21,172	Laying pipe	0 13 4	Foot.	17,643 4 0	2,05,574 0 0
	Total ..	...	...	...	9,83,295 1 6
	Recapitulation.				
	Cost of filtering well	...	..	...	13,914 0 0
	Cost of first tunnel	...	...	...	1,822 3 9
	Cost of second tunnel...	...	...	...	2,03,225 13 4
	Cost of remaining part of masonry aqueduct	...	...	...	4,74,901 9 5
	Cost of Distributing Reservoir	...	...	...	70,994 0 0
	Cost of conduit pipe portion	...	...	...	2,17,437 7 0
	Total ...	...	...	...	9,82,295 1 6
	Contingencies at 5 per cent. Rs. ...	...	...	...	49,147 12 0
	Grand total Rs. ...	...	...	...	10,31,442 13 6

(Signed) MOORADKHAN,
Khan Bahadur.

Kurrachee, 27th April 1867.

To

MAJOR W. R. LAMBERT,

Collector of Kurrachee.

SIR,

In continuation of my letter, dated 27th instant, to the address of the Commissioner in Sind and in accordance with your wishes that I should explain the terms upon which I would undertake to carry out the scheme of supplying Kurrachee with water from the Hubb River, I beg respectfully to submit for your favourable consideration my views on this subject.

2nd. I will assume that the minimum daily supply shall be fixed at 23 lakhs of gallons, and that the works shall be capable of supplying upto sixty lakhs of gallons daily, as suggested in the concluding para. of my letter above quoted. This arrangement will increase my estimate to eleven and a half lakhs of rupees.

3rd. The cost of maintenance of the works, both as respect to repairs and efficient supervision, will be considerable, the pipe portion will demand much care and attention to prevent deterioration from the saline soil in which it will be laid and spare pipes must be kept in stock.

4th. Looking to the outlay to be incurred in keeping the works at all times in the most perfect order also to the cost of raising the dam an additional four feet with four feet sluices and to a moderate income from the amount expended, I beg to submit for your consideration the following terms.

5th. That I shall enter into an engagement to keep up a constant supply of 23 lakhs gallons of water daily.

6th. That I shall be prepared to afford a futher supply daily of 37 lakhs, or an aggregate of 60 lakhs of gallons daily if required.

7th. That I shall receive from the Municipal Administration an annual sum of two lakhs of rupees for 23 lacs of gallons daily.

8th. That I shall receive from the Municipal Administration annas two for every 1,000 gallons, supplied in excess of 23 lacs of gallons daily.

I have, etc.,

MOORADKHAN,
Khan Bahadoor.

Kurrachee, 13th April 1867.

Manora, 23rd June 1867.

I now return the plans and papers of Mooradkhan's Hubb Water-supply Project, and in answer to the two chief questions :—

First as to what should be done before submitting it to Government.

First.—I am of opinion that the project is not in a shape for submission to Government, or to any Engineer for a definite opinion ; and that it should be carefully revised or rather framed anew by a competent Engineer—by such a course much time and trouble will, in the end, be saved.

At the same time that the papers contain quite enough to show that the project is well worth attention.

Second what would be a fair remuneration to Mooradkhan for his expenditure and risk.

Second.—The second question is not so easy to answer in the present state of the Project, but while assured that Mooradkhan greatly undertakes the cost of carrying out the scheme my impression is that the Municipality ought to obtain the advantages which he promises at a less cost than the rate of yearly payment named by Mooradkhan.

At the same time if the scheme could not be carried out—as I think it might—without Mooradkhan's intervention, it would be well for the Municipality to close with his offer. The arrangement would no doubt be a profitable one for Mooradkhan (if he could find the means for carrying through the work) but of course he might fairly expect to make a good thing of his spirited venture.

2. In explanation of the first answer I may say that the project as drawn up, even assuming the survey to be correct as far as it goes, gives rather vague information as to the quantity of water obtainable, even at the minimum of 23 lacs of gallons daily—still the presumption is in favour of that quantity at least being available and what a boon it would be to Kurrachee giving each of its 60,000 inhabitants 30 gallons daily and leaving 5 lacs of gallons over for watering roads and manufacturing purposes.

3. But when it comes to increasing the supply to 60 lacs of gallons, or upwards of twice and a half the above, there is I may say no data to go on. Mooradkhan talks of getting this by raising the dam another four feet, but so far as his surveys show, the probability seems all against this being sufficient.

4. Then the question of silting up of the reservoir requires to be studied; and provision to be made against it in the construction of the dam, regarding which no details are given.

5. The dam should of course be most carefully designed and should in my opinion form a portion of the project to be submitted.

6. The levels of the country as shown are favourable, and I have no reason to doubt their correctness. This should however be carefully tested.

7. The estimate requires much correction; without going into details, I may mention a few matters which are apparent on a very cursory examination.

8. The "distributing reservoir", which Mooradkhan says (para. 8) is to contain nearly three days' supply, *i.e.*, 69 lacs of gallons, would hold only about 25 lacs, or a little over one day's supply—

Three days supply is decidedly the very least the reservoir ought to be capable of containing and on this account an addition of about $1\frac{1}{4}$ lacs of rupees should be made to the estimate.

The dimensions area 200 × 100 × 20 = 4,00,000 gallons 4,00,000 × $6\frac{1}{4}$ = 25,00,000.

9. On the other hand the iron piping is designed unnecessarily thick. 5/8ths would be sufficient. At the same time the price per ton might well be increased from £ 8 to £ 10 leaving about 40,000 to be deducted from the estimate, on this account.

10. The cost of the masonry of the aqueduct throughout should be increased by at least one-fourth.

11. The cost of the tunnel work is also greatly underrated. The excavation rates should be doubled, and the masonry rate (beside the general addition noticed in last para.) should be increased by 50 per cent. For instance Mooradkhan estimates about 200 yards of tunnelling through hard rock, at about Rs. 1,000 or Rs. 5 per yard. This (the short tunnel) or a portion of it might be tried under careful supervision, and thus an opinion might be formed of his rates for the remainder. He estimates the arched work of the tunnels at the same rate as in the open. I need hardly say that this would never do.

12. The alterations necessary on the above account are roughly of course—

Extra for masonry of aqueduct	... Rs.	98,114
Extra for masonry of tunnels	... ,,	1,20,032
Extra for excavation of tunnels	... ,,	67,867
Extra for distribution reservoir	... ,,	1,25,000
	Rs.	4,11,013
Deducting for piping ...	... ,,	40,000
	Rs.	3,71,013
Add 5 per cent. for contingencies	... ,,	18,550
Total	... Rs.	3,89,563

or say 4 lacs of rupees to be added to the first estimate, making it rupees 14,31,442; or about $4\frac{1}{2}$ lacs of rupees to the second estimate making it Rs. 16 lacs.

13. It is possible that errors may exist in the estimate which I have not detected as I have not examined it in detail. The details also of filtering and measuring arrangements would require to be carefully worked out. I have however pointed out enough I think to show that the project requires careful revision. The information as to strata specially at the tunnels, is very deficient. No borings or trial shafts appear to have been taken as far as the papers show—and this should of course be attended to before attempting to frame a reliable estimate.

14. As regards the second question I may say that if the project cannot be carried out except through Mooradkhan's Agency, I believe the Municipality would do well to close with his terms, if no better can be obtained from him.

15. Two lacs of rupees a year for 23 lacs of gallons daily is only 4 annas per 1,000 gallons—the cost of distributing mains ought not to be more than say one anna extra making a total of 5 annas for 1,000 gallons, the merest fraction of the present cost of water. In illustration I may mention that it costs the Harbour works at least 5 annas for 100 gallons delivered in our workshops tank, and we think ourselves very fortunate to get the water at such cost through the intervention of the Municipal piping from the Rambagh Tank—which has paid for itself over and over again.

16. But even supposing the water could not be obtained for a lower rate than that at which Mooradkhan offers, I think that the Municipality would do well to keep the provision of water-supply in their own hands. The arrangement is one of a kind very open to dispute, and even though it might work well with Mooradkhan—the chances are that with his assigns or successors difficulties would arise.

17. And I believe that the Municipality could do the work much cheaper for themselves, if they could arrange either to make the dam, or to pay Mooradkhan a fair rate for the use of it—and construct the rest of the works themselves.

18. I estimate the cost of the work, under such circumstances roughly as follows:—

* Estimated by Mooradkhan at 11½ lacs.	*Aqueduct etc.	Rs.	16,00,000
	Dam ...	,,	4,00,000
		Rs.	20,00,000
6 per cent. per annum on 20 lacs of of rupees. ...		Rs.	1,20,000
Maintenance, etc.		,,	30,000
Total ...		Rs.	1,50,000

that is 1½ lacs of rupees per annum for the minimum supply of 23 lacs of gallons daily for which Mooradkhan proposes to charge 2 lacs.

19. And then it comes to increasing the supply to 60 lacs of gallons—the saving by the Municipality keeping the works in their own hands becomes still more apparent. For this Mooradkhan would charge 2 annas for 1,000 extra gallons or Rs. 1,68,812 per annum on 37 lacs of gallons daily to bring up the supply to 60 lacs.

20. I roughly estimate the extra work in raising the dam and addition to distributing reservoir, with other expenses connected with the extra supply at a yearly charge of 1 lac of rupees.

Thus we have—

	Charge by Mooradkhan.	Cost if done by Municipality.
For 23 lacs ...	Rs. 2,00,000 ...	Rs. 1,50,000
Extra for 37 lacs...	,, 1,68,812 ...	,, 1,00,000
	Rs. 3,68,812 ...	Rs. 2,50,000

difference in favour of the Municipality doing the work Rs. 1,18,812 or say at the least a lac of rupees per annum.

21. I may perhaps be over sanguine in assuming that the Municipality could get the money at 6 per cent. though I should think this might be managed, as it is a matter in which Government would no doubt be glad to lend a helping hand.

22. But at any rate it is certain the Municipality can get money on as favourable terms at least as Mooradkhan can. The latter may have peculiar facilities in command of labour for this particular work and if so he would be in a position to underbid any contracts for carrying it out—in this way no doubt his agency might very well be employed.

23. I cannot help thinking that if Mooradkhan undertook the work even on the terms he proposes he would after a year or so want an advance of coin—and that the Municipality would in the end have to pull him through with the job. A company might carry it out, but not I think any one man of Mooradkhan's means; and then if he gets into difficulties, will he not have a kind of claim upon Government, after having been invited by the Commissioner in Sind to enter on the project—or at least having had some inducement held out to him.

24. As regards your remark about the surveys of the ground where the pipe is to terminate, this would make no difference as to the distribution of the water—as no stand pipe would be required. At the same time it would no doubt be well if it could be managed to have the distributing reservoir nearer to the town so as to have less piping between to go wrong—this may perhaps be altered somewhat, but is not, I think an essential point.

25. I fear you will say I have written too much about this, but the subject is one in which I would gladly help if in my power knowing as of course we all must, what a boon a good water supply would be—both for the health and appearance of the place—besides bringing in a handsome addition to the Municipal revenues.

W. H. PRICE.

Kurrachee, 23rd July 1867.

To

THE MAGISTRATE AND PRESIDENT,

KURRACHEE MUNICIPAL COMMISSION,

Kurrachee.

SIR,

I have the honour to acknowledge receipt of your letter No. 1395, dated the 15th instant forwarding copy of the Resolution passed by the Committee of Kurrachee Municipality at its meeting on 9th instant relative to my proposition to supply Kurrachee with water from the Hubb River.

2. I beg to tender my thanks for the offer which is made me of the services of an Engineer of which I shall have pleasure in availing myself, but with reference to the agreement which I am asked to enter into, to carry out any plan he may prepare, I desire to make the following explanations.

3. Plans and estimates for constructing the dam at the Hubb have been already prepared by me, and I am well satisfied that, when carried through, they will effect the purpose intended, and I may add that these plans have been examined and approved by several Engineers of eminence both Royal and Civil.

4. Were I unreservedly to accept the terms named in your Resolution, I might find that the plans I propose carrying through would be upset, and I might be committed to a greater outlay than I at present contemplate.

5. I do not consider this at all likely however, and I have no doubt any Engineer the Municipality named would be satisfied with the plans already prepared. I acordingly beg respectfuly to propose that the Municipality would appoint an Engineer in whom they have confidence to examine my plans and estimates in the first instance. Should any changes appear desirable, it will be for me to consider if I can carry them through, but as I anticipate no material difference of opinion betwixt any Engineer the Municipality may name and

the Engineer I shall place in charge, I believe that there will be no difficulty in my coming under the agreement the Municipality desires. I naturally however wish in the first instance to have some idea of what is required.

6. I therefore request that you will lay this letter before the Municipality at its next meeting and on an Engineer being appointed I shall have pleasure in laying my plans and estimates before him.

(Sd.) MOORADKHAN.

NO. 1489 OF 1867.

GENERAL DEPARTMENT.

True copy forwarded to the Acting Commissioner in Sind with reference to the President's No. 1391, dated 13th instant, Moorad Khan's proposition will effect all that was aimed at by the Resolution of the Municipality and in a more simple manner. The President would therefore propose that one or more Engineers now resident in Kurrachee be named and that Moorad Khan's plan for his bund be referred to them.

(Sd.) W. R. LAMBERT,
Magistrate and President,
Kurrachee, 23rd July 1867. Kurrachee Municipality.

NO. 745 OF 1867.

GENERAL DEPARTMENT,
Kurrachee, 24th July 1867.

The Acting Commissioner presents compliments to the Magistrate and President, Kurrachee Municipality, and requests to be informed whether the word "manner" should be read for matter in his memorandum No. 1489, dated 23rd instant.

Will Mr. Lambert have the goodness to state whether the suggestion contained in the above quoted memorandum is intended to be in substitution of the recommendations contained in letter No. 1391, dated 9th instant, with accompaniments and whether the sanction of Government to appointment of Executive Engineer Officer and the arrangement of his remuneration is any longer necessary.

The Acting Commissioner will be glad to receive an analysis of the Hubb water said to have been lately received by Mooradkhan if procurable.

W. H HAVELOCK,
Acting Commissioner in Sind.

To

THE MAGISTRATE AND PRESIDENT,
Kurrachee Municipality.

NO. 1499 OF 1867.

GENERAL DEPARTMENT,
Kurrachee, 25th July 1867.

Reply to the Acting Commissioner's memorandum No. 745, dated 24th July 1867.

1. The word referred to in paragraph 1 is "manner"

2. An Engineer to examine the Hubb and revise the aqueduct plans will be necessary in any case; I contemplated his being one of the committee, making such examination of the site of the dam, and doing such outdoor work (which will not differ materially from what he would have to do in case he had to make a design "*de novo*" for the dam) as the committee might consider necessary. If it is thought better to leave the whole thing in his hands I see no objection. I suggested the committee more as an assistance to him than anything else.

3. Dr. Pelly has got the President's copy of the analysis of the Hubb water. Perhaps the Acting Commissioner will get it from him.

W. R. LAMBERT,
Magistrate and President,
Kurrachee Municipality.

No. 1792 of 1867.

Revenue Department.

From

W. H. HAVELOCK, Esquire.

Acting Commissioner in Sind.

To

HIS EXCELLENCY THE RIGHT HONORABLE,
W. R. SEYMOUR V. FITZGERLD,

Governor and President in Council,
Bombay.

Commissioner's Office,
Kurrachee, 7th August 1867.

Right Honorable Sir,

I have the honor to forward a very interesting correspondence received from Major Lambert, Collector of Kurrachee, and President, Municipality, with his communication as per margin, on the subject of water-supply by means of an aqueduct to be carried from a dam now under construction on the Hubb River at a distance of about 16 miles from Kurrachee, by Khan Bahadur Mooradkhan, a Zamindar and Contractor, already well known in the Province for his intelligence and enterprise.

No. 1391, dated 13th July 1867.

2. It is unnecessary in this letter to touch upon the Engineering features of the proposal which have been already scrutinized and approved in general terms by Mr. Price, Superintendent of Harbour Works at Kurrachee. I will therefore merely mention that the project as now submitted has two objects—the original one, a supply of water for irrigation to the projector's estate, the second or supplementary one, the utilization of the lake behind the dam for water-supply at Kurrachee, of which ample details are appended.

3. I would invite the attention of your Excellency in Council to the Resolution of the Managing Committee of the Kurrachee Municipality quoted in para. 6 of the Collector's letter No. 1391, dated 13th July 1867.

4. It is shewn in the 15th and the following paras. of Major Lambert's letter that the support of Government is anticipated, partly by direct contribution to a certain amount for value of water, and partly by putting the Municipality through the medium of the Act, of which draft is now before Government, in a position as regards income to pay for water-supply on a liberal scale. It therefore appears indispensable that the work should from its earliest stage have the supervision of an Officer of the Public Works Department, or a professional Engineer on whom Government have confidence. This condition is rendered more strikingly apparent by that portion of the proposal which embraces an advance of several lacs of rupees from Government (or the Municipality) to be repaid by the value of the water.

5. It is expected by Mooradkhan and the Collector that the new construction at the dam will be commenced after the August rains and be completed in February next; also that in the interval the officer to be employed in superintendence will have completed revision of the plans and estimates for the aqueduct, and have framed other plans and estimates for the distributing mains. The latter should, I think, include supply to the Cantonment and high service for European barracks on the new model.

6. When this essential information shall have been furnished, the project will be in a better form for detailed consideration by the Superintending Engineer, the Municipality and Government, and I will now briefly notice some features which, in the event of a favourable report as regards construction and cost, demand careful circumspection.

7. The dam which has been originally planned for irriga-
Para. 8. tion is the property of Mooradkhan, and the Collector and Managing Committee are of opinion that it must remain his absolute property.
Para. 11. But it is already discovered that the dam itself will have to be entirely redesigned. In furtherance of the latter view the Collector
Para. 12. proposed that Mooradkhan should be pledged to adopt the plan of the Government Engineer. Your Excellency in Council will however

perceive from the more recent, letter dated 23rd ultimo, from Moorad Khan, that though soliciting the advice of a Government Engineer, he declines to commit himself to the adoption of any particular plan, and reserves the right to act upon his own discretion.

8. This materially alters the aspect of the case, but renders it simpler, because if Mooradkhan preferred a different plan from that approved by the professional advisers of Government, the negotiation would thereby terminate as far as Government interest in the work is concerned.

9. Referring however to the proposed advance of money from time to time by the Municipality, with the assistance of Government, towards to expenditure on the aqueduct, there would be thus created a triple interest between—

(1) Mooradkhan as entire owner of the dam with its irrigational adjuncts and joint owner of the aqueduct.

(2) The Municipality.

(3) Government.

These are conditions which, even if they worked smoothly at the commencement with Mooradkhan himself, would inevitably lead to confusion in relation to his heirs and assigns, and this difficulty though not insuperable, would require cautious treatment.

10. Returning to the subject of the proposal of the Municipality mentioned above in para. 3, I think there can be no objection to their using their discretion in the expenditure on plans and supervision at the desire of Mooradkhan, to the extent of a few thousand rupees. I would also submit for the favourable consideration of Your Excellency in Council the recommendation of the President that a Government Engineer be allowed to undertake the duty. Lieutenant Merewether, now engaged on the Harbour Works is, I understand, willing, if requested, to do what is necessary and has the consent of of Mr. Price. Mooradkhan, whose confidence in the matter it is desireable to secure, would be satisfied with the selection of this able and indefatigable Officer.

11. It appears fair that the Officer selected should receive some remuneration for the extra labour and responsibility imposed, and this the Municipal body have expressed their willingness to defray. I therefore solicit the early instructions of Your Excellency in Council—firstly, as to the proposal of the Managing Committee of the Kurrachee Municipality, and secondly, if that be approved, as to the nomination of an Officer and the amount of remuneration he should receive. The plan involves Government in no responsibility and commends itself as promising to place one of the plans for Kurrachee water-supply before the Superintending Engineer and Government in a position for definite adoption or rejection.

12. An analysis has been received from Bombay of the water sent from the Hubb River, and though this is not altogether favourable, I believe I may state that local testimony is so strongly in favour of the practical use of the water for drinking purposes, that the discovery of chemical deposits ought not to prevent the purely tentative step now recommended.

I have the honor to be,
Right Honorable Sir,
Your most obedient servant,

W. H. HAVELOCK,
Acting Commissioner in Sind.

An analysis of water from the Hubb River.

1. Hubb River No. 1 from site of dam, centre of stream 8th May 1867.
2. Hubb River No. 2 from river opposite Engine-house 8th May 1867.
3. Hubb River No. 3 from river at one mile, 8th May 1867.
4. Hubb River No. 4 from river at two miles, 8th May 1867.
5. Hubb River No. 5 from pool at site of dam, 8th May 1867.
6. Hubb River No. 6 from pool at Engine-house, 8th May 1867.

All the samples had a faintly saline taste, and were clear, colourless, and destitute of odour. All deposited on standing an extremely small quantity of yellowish sediment, consisting chiefly of vegetable.

Summary nalysis of six samples of water taken from the Hubb River near Kurrachee.

No. of sample.	1	2	3	4	5	6
	Grains per gallon.					
Organic matter	·62	·55	·53	·49	·48	·49
Chlorine	18·39	18·39	18·39	18·39	17·26	16·90
Sulphuric acid	12 98	12 98	12·98	12 86	11·90	11·90
Lime	6·86	6·86	5·98	6·08	5·29	6·34
Magnesia	4·79	4·54	5·05	2·90	5·05	4·35
Total solid	63·42	64·54	63·56	66·08	58·52	58·24
Specific gravity	1,000·89	1,000·94	1,000·63	1,000·81	1,000·81	1,000 82
Clark's degrees of hardness ..	24°·22	23°·60	23°·30	18°·10	22°·07	22°·18

No. 324 of 1867.

The undersigned presents compliments to Khan Bahadoor Mooradkhan, and begs to inform him that an analysis of the specimens of water from the Ḥubb River, drawn on the 8th May last and forwarded to the Chemical Analyser, Bombay, has shewn that the water is highly impregnated with salts and consequently not wholesome for drinking.

A copy of the analysis is annexed.

J. GORDON ASHER, M.D.,
Secretary, Sanitary Commission.

Poona, 27th June 1867.

NO. I.C.W.-1 OF 1868.

PUBLIC WORKS DEPARTMENT.

Bombay Castle, 3rd January 1868.

SUBJECT.—*Water-supply.*

Supplying Kurrachee with water from the Hubb River.

Letter from the Commissioner in Sind No. 1792, dated 7th August 1867.

Forwards with observations, correspondence on the subject of supplying Kurrachee with water by means of an aqueduct to be carried from a dam now under construction on the Hubb River, at a distance of about 16 miles from Kurrachee.

RESOLUTION.—Government are of opinion that further examination should be made before the arrangement suggested is adopted; and that it is not advisable to derive the water-supply of Kurrachee from any private source, if any other arrangement is feasible at no great increase of outlay.

2 Mr. Price in his capacity as Superintendent, Kurrachee Harbour Works, has now but little to do; he should therefore be deputed to examine the banks of the Hubb River in the neighbourhood of Mooradkhan's Bund, with a view of submitting to Government a project independent of Mooradkhan, while at the same time he should test that of Mooradkhan as an alternative scheme.

3. The Municipality should supply Mr. Price with all assistance he may require in the way of surveyors, draftsmen and establishment, and should defray his travelling expenses; at the rate of 10 rupees per diem, when actually employed on the duty away from Kurrachee, but Government will not require them to grant Mr. Price any further remuneration.

4. Mooradkhan should be informed that Government decline to take into consideration his proposal to supply Kurrachee with water until his bund is completed.

BAKER,
Acting Secretary to Government.

To

THE COMMISSIONER IN SIND.

G. R., P. W. D., No. 1-C. W. of 3rd January 1868 *re* supplying Kurrachee with water from the Hubb River.

NO [redacted] OF 1868.

POLITICAL DEPARTMENT.

Dated 15th January 1868.

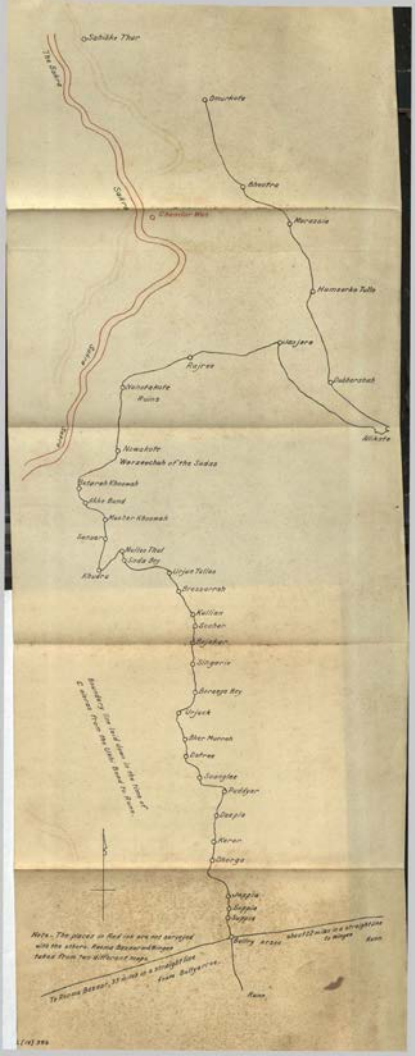
Forwarded to the Collector and Magistrate of Kurrachee and President, Kurrachee Municipality, for information and guidance in reference to his letter No. 1391, dated 12th July last.

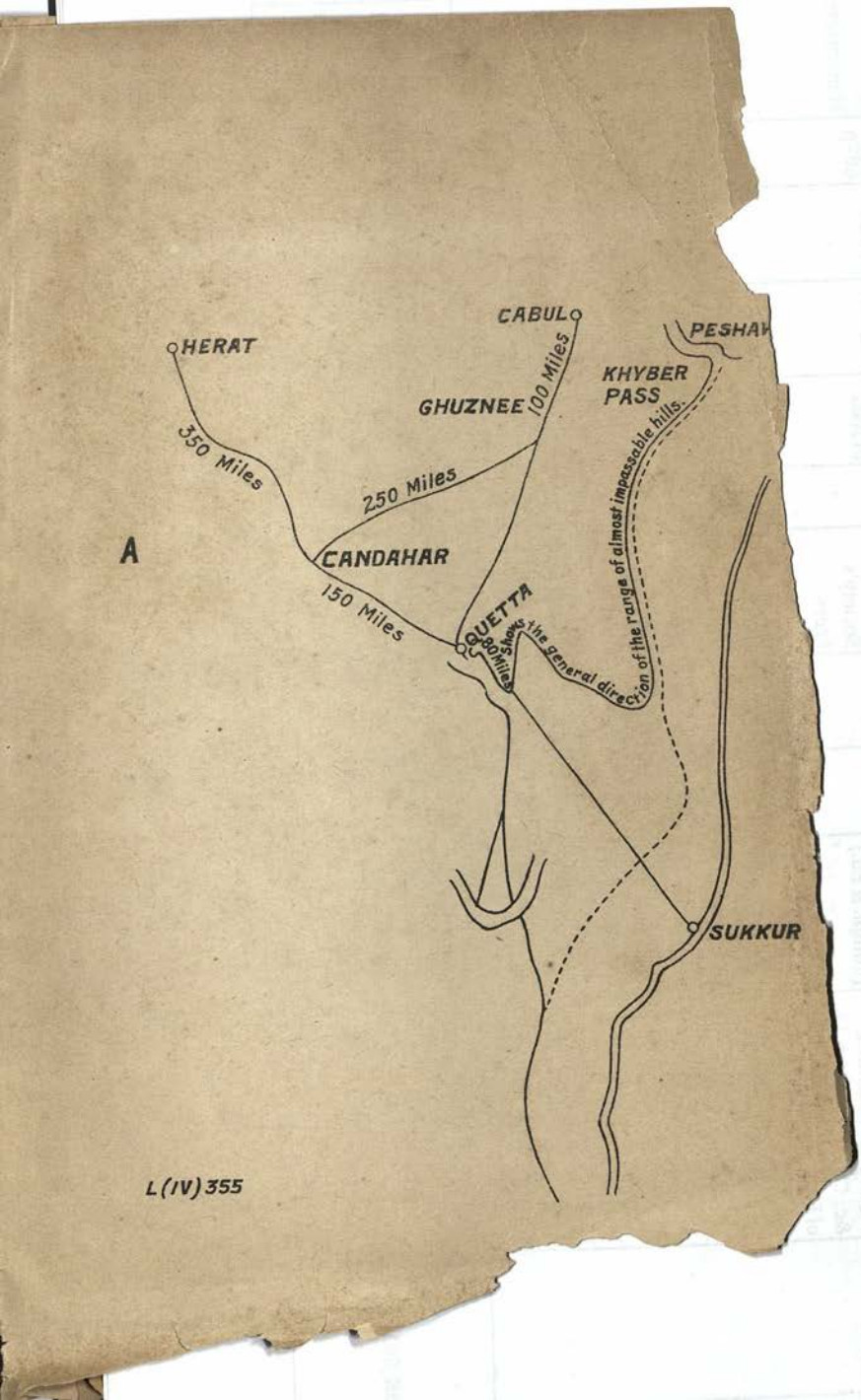
Mr. Price may be supplied with a copy of the printed correspondence.

The instructions conveyed in para. 4 of the Government Resolution should be intimated to Mooradkhan.

W. H. HAVELOCK,
Acting Commissioner in Sind.

KARACHI: THE COMMISSIONER'S PRINTING PRESS.


Sahibke Thar
The Sakra
Omurkote
Sakra
Chamber Wan
Bheotra
Marasaia
Humsarka Tulla
Sakra
Rajree
Nanotakote
Ruins
Rubbarshah
Allikote
Nawakote
Warseechah of the Sadas
Batarah Khoowah
Akka Bund
Mustar Khoowah
Sansar
Mullas Thal
Sada Bay
Khudra
Urjun Tulla
Bressarrah
Kullian
Soohar
Rajakar
Sihgarin
Boreeya Bay
Urjuck
Bhor Murrah
Dahree
Soanglee
Paddyar
Deepla
Karar
Dhorga
Jeppie
Suppie
Suppie
Bellry
Note - The places in Red ink are not surveyed with the others. Rooma Bassar and Wingee taken from two different maps.
To Rooma Bassar, 33 miles in a straight line from Bellyarrow.
about 22 miles in a straight line to Wingee
Rann
Rann


CABUL
HERAT
PESHAW
KHYBER PASS
GHUZNEE
100 Miles
350 Miles
250 Miles
A
CANDAHAR
150 Miles
QUETTA
80 Miles
Shows the general direction of the range of almost impassable hills.
SUKKUR
L(IV)355

00108236

Digitized with financial assistance from
Shri Brihad Bhartiya Samaj
on 20 February, 2020